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(54) Title: GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

(57) Abstract

This invention relates to novel human genes, to proteins expressed by the genes, and to variants of the proteins. The invention also relates to diagnostic and therapeutic agents related to the genes and proteins, including probes, antisense constructs, and antibodies. The invention further relates to polynucleotides differentially expressed in prostate cancer.

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GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

FIELD OF THE INVENTION

This invention relates to the area of diagnosis, prognosis, and treatment of cancer, tumor progression, hyperproliferative cell growth, and accompanying physical and biological manifestations. More specifically, the invention includes polynucleotides that are differentially regulated in prostatic disorders, such as metastatic prostate cancer, localized prostate cancer, and benign prostate hyperplasia (BPH).

BACKGROUND OF THE INVENTION

Genes that are up- or down-regulated in cancer or tumor progression are useful for therapeutic and diagnostic purposes. For example, detection of genes or gene expression products up-regulated in hyperproliferative cells can be a predictive or diagnostic marker of the onset or the progression of cancer. Early diagnosis can be useful if the cancer, tumors, or hyperproliferating cells can be inhibited, removed, or terminated to prevent metastasis or recurrence of cancerous growth. Such early warning is of particular use to prostate cancer patients, where removal of the growth, tumor, or cells is beneficial if the disease is confined to the prostate. There is a need in the art for genes related to cancer and tumor progression.

SUMMARY OF THE INVENTION

The present invention provides methods and reagents for diagnosing cancer, tumor progression, hyperproliferative cell growth, and accompanying biological and physical manifestations. Reagents for such diagnostic kits include:

(a) polynucleotides comprising a sequence capable of hybridizing to one or more of SEQ ID NO:1-339 or complement thereof;

(b) polypeptides comprising the amino acid sequence encoded by any one of SEQ ID NO:1-339; and

(c) antibodies capable of binding polypeptides comprising the amino acid sequence of (b).

The methods of diagnosis of the present invention include both nucleic acid assays and immunoassays.

In another embodiment, the present invention provides both compositions and methods for treating or ameliorating cancer, tumor progression, hyperproliferative cell growth, and accompanying biological and physical manifestations. The compositions for treatment or amelioration include:

(a) polynucleotides comprising the sequence capable of hybridizing to one or more of the sequences shown in SEQ ID NO:1-339 and complement thereof, including antisense, ribozyme and gene therapy nucleic acid constructs;

(b) polypeptides comprising the amino acid sequence encoded by any one of SEQ ID NO:1-339; and

(c) antibodies capable of binding polypeptides of polypeptides comprising the amino acid sequence (b).

Methods of treatment or amelioration include administering compositions of polynucleotides, polypeptides, antibodies, or combinations thereof and can be used

(a) to inhibit translation and/or transcription;

(b) to inhibit biological activity;

(c) as a vaccine antigen; and

(d) as an immune system inducer.

Such compositions can be administered systemically or locally to the desired site.

In one embodiment, the present invention provides a composition comprising an isolated polynucleotide selected from the group consisting of

(a) any one of SEQ ID NOs:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polynucleotide that encodes a variant of the polypeptide encoded by (a); and

(c) a polynucleotide encoding a protein expressed by a polynucleotide having the sequence of any one of the sequences of (a).

Preferably, the nucleic acid obtained from the biological material of part (b) above is genomic DNA or mRNA. The nucleic acid can also be cDNA complementary to the mRNA.

Another embodiment of the invention is the use of the isolated polynucleotides or parts thereof as diagnostic probes or as primers.

In another embodiment, the present invention provides a composition comprising a polypeptide, wherein said polypeptide is selected from the group consisting of:

(a) a polypeptide encoded by any one of SEQ ID Nos:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polypeptide encoded by full-length mRNA or cDNA corresponding to any one of SEQ ID NO:1-339; and

(c) a variant of the protein (a) or (b);

In certain preferred embodiments, the polynucleotide is operably linked to an expression control sequence. The invention further provides a host cell, including bacterial, yeast, insect and mammalian cells, transformed with the polynucleotide sequence. The invention also provides the full-length cDNA and the full length human gene corresponding to the polynucleotide.

Protein and polypeptide compositions of the invention may further comprise a pharmaceutically acceptable carrier. Compositions comprising an antibody that specifically reacts with such protein or polypeptide are also provided by the present invention.

The invention further relates to a polypeptide or nucleic acid obtained by transforming a host cell with nucleic acid comprising at least one of SEQ ID NO:1-339, culturing the host cell, and recovering the replicated nucleic acid, the expressed RNA, and/or the expressed polypeptide.

Brief Description of the Figures

Figure 1 provides the open reading frame for clone SL 195.

Figure 2 provides the open reading frame for clone SL 197.

Figure 3 provides the immunohistochemistry staining results for clone SL 5 expression in a variety of normal and tumor tissues.

Detailed Description of the Invention

Genes that are up- or down-regulated in cancer or tumor progression are useful for therapeutic and diagnostic purposes. For example, a diagnostic assay to determine the stage of the disease also is useful in tailoring treatment of aggressive versus more mild cancer or tumor progression. The polynucleotide sequences and encoded polypeptides of the present invention are useful for these diagnostic or prognostic purposes.

Further, modulation of genes or gene expression products that are mis-regulated can be used to treat or ameliorate cancer, tumor progression, hyperproliferative cell growth, and the accompanying physical and biological manifestations. For example, the polynucleotide sequences provided herein as SEQ ID NO:1-339, can be used to construct the following polynucleotide and polypeptide compositions that are useful for treatment: antisense; ribozymes; antibodies; vaccine antigens; and immune system inducers, to induce dendritic cells, for example.

Identified herein are polynucleotide sequences that are upregulated in a cancer cell line, more specifically in a prostate cancer cell line. Thus, the present invention relates to methods and reagents for diagnosis, and to methods and compositions for treatment.

I. Use of Polynucleotides Having a Sequence of One or More of SEQ ID NO:1-339 to Obtain Full-Length cDNA and Full-Length Human Gene and Promoter Region

Full-length cDNA molecules comprising the disclosed sequences are obtained as follows. The polynucleotide or a portion thereof comprising at least 12, 15, 18, or 20 nucleotides is used as a hybridization probe to detect hybridizing members of a cDNA library using probe design methods, cloning methods, and clone selection techniques as described in U.S. Patent No. 5,654,173, "Secreted Proteins and Polynucleotides Encoding Them," incorporated herein by reference. Libraries of cDNA are made from selected tissues, such as normal or tumor tissue, or from tissues of a

mammal treated with, for example, a pharmaceutical agent. Preferably, the tissue is the same as that used to generate the polynucleotides, as both the polynucleotides and the cDNA represent expressed genes. Most preferably, the cDNA library is made from the biological material described herein in the Examples. Alternatively, many cDNA libraries are available commercially. (Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual, 2nd Ed.* (Cold Spring Harbor Press, Cold Spring Harbor, NY 1989).

Members of the library that are larger than the polynucleotide, and preferably that contain the whole sequence of the native message, are obtained. In order to confirm that the entire cDNA has been obtained, RNA protection experiments are performed as follows. Hybridization of a full-length cDNA to an mRNA will protect the RNA from RNase degradation. If the cDNA is not full length, then the portions of the mRNA that are not hybridized will be subject to RNase degradation. This is assayed, as is known in the art, by changes in electrophoretic mobility on polyacrylamide gels, or by detection of released monoribonucleotides. Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual, 2nd Ed.* (Cold Spring Harbor Press, Cold Spring Harbor, NY 1989). In order to obtain additional sequences 5' to the end of a partial cDNA, 5' RACE (PCR Protocols: A Guide to Methods and Applications (Academic Press, Inc. 1990)) is performed.

Genomic DNA is isolated using polynucleotides in a manner similar to the isolation of full-length cDNAs. Briefly, the polynucldotides, or portions thereof, are used as probes to libraries of genomic DNA. Preferably, the library is obtained from the cell type that was used to generate the polynucleotides, but this is not essential. Most preferably, the genomic DNA is obtained from the biological material described herein in the Examples. Such libraries may be in vectors suitable for carrying large segments of a genome, such as P1 or YAC, as described in detail in Sambrook *et al.*, 9.4-9.30. In addition, genomic sequences can be isolated from human BAC libraries, which are commercially available from Research Genetics, Inc., Huntville, Alabama, USA, for example. In order to obtain additional 5' or 3' sequences, chromosome walking is performed, as described in Sambrook *et al.*, such that adjacent and

overlapping fragments of genomic DNA are isolated. These are mapped and pieced together, as is known in the art, using restriction digestion enzymes and DNA ligase.

Using the polynucleotides sequences of the invention, corresponding full length genes can be isolated using both classical and PCR methods to construct and probe cDNA libraries. Using either method, Northern blots, preferably, are performed on a number of cell types to determine which cell lines express the gene of interest at the highest rate.

Classical methods of constructing cDNA libraries are taught in Sambrook et al., supra. With these methods, cDNA can be produced from mRNA and inserted into viral or expression vectors. Typically, libraries of mRNA comprising poly(A) tails can be produced with poly(T) primers. Similarly, cDNA libraries can be produced using the instant sequences as primers.

PCR methods are used to amplify the members of a cDNA library that comprise the desired insert. In this case, the desired insert will contain sequence from the full length cDNA that corresponds to the instant ESTs. Such PCR methods include gene trapping and RACE methods. Gruber *et al.*, PCT WO 95/04745 and Gruber *et al.*, U.S. Pat. No. 5,500,356. Kits are commercially available to perform gene trapping experiments from, for example, Life Technologies, Gaithersburg, Maryland, USA. PCT Pub. No. WO 97/19110. (Apte and Siebert, *Biotechniques 15*:890-893, 1993; Edwards *et al., Nuc. Acids Res. 19*:5227-5232, 1991).

The promoter region of a gene generally is located 5' to the initiation site for RNA polymerase II, and can be obtained by performing 5' RACE using a primer from the coding region of the gene. Alternatively, the cDNA can be used as a probe for the genomic sequence, and the region 5' to the coding region is identified by "walking up." If the gene is highly expressed or differentially expressed, the promoter from the gene may be of use in a regulatory construct for a heterologous gene.

Once the full-length cDNA or gene is obtained, DNA encoding variants can be prepared by site-directed mutagenesis, described in detail in Sambrook *et al.*, 15.3-15.63. The choice of codon or nucleotide to be replaced can be based on disclosure herein on optional changes in amino acids to achieve altered protein structure and/or function.

As an alternative method to obtaining DNA or RNA from a biological material, nucleic acid comprising nucleotides having the sequence of one or more polynucleotides of the invention can be synthesized. Thus, the invention encompasses nucleic acid molecules ranging in length from 15 nucleotides (corresponding to at least 15 contiguous nucleotides of one of SEQ ID NO:1-339) up to a maximum length suitable for one or more biological manipulations, including replication and expression, of the nucleic acid molecule. The invention includes but is not limited to (a) nucleic acid having the size of a full gene, and comprising at least one of SEQ ID NO:1-339; (b) the nucleic acid of (a) also comprising at least one additional gene, operably linked to permit expression of a fusion protein; (c) an expression vector comprising (a) or (b); (d) a plasmid comprising (a) or (b) ; and (e) a recombinant viral particle comprising (a) or (b).

The sequence of a nucleic acid comprising at least 15 contiguous nucleotides of at least any one of SEQ ID NO:1-339, preferably the entire sequence of at least any one of SEQ ID NO:1-339, is not limited and can be any sequence of A, T, G, and/or C (for DNA) and A, U, G, and/or C (for RNA) or modified bases thereof, including inosine and pseudouridine. The choice of sequence will depend on the desired function and can be dictated by coding regions desired, the intron-like regions desired, and the regulatory regions desired.

Where the entire sequence of any one of SEQ ID NO:1-339 is within the nucleic acid, the nucleic acid obtained is referred to herein as a polynucleotide comprising the sequence of any one of SEQ ID NO:1-339.

II. Expression of Polypeptide Encoded by Full-Length cDNA or Full-Length Gene

The polynucleotide, the corresponding cDNA, or the full-length gene is used to express the partial or complete gene product. Appropriate polynucleotide constructs are purified using standard recombinant DNA techniques as described in, for example, Sambrook *et al.*, (1989) *Molecular Cloning: A Laboratory Manual*, 2nd ed. (Cold Spring Harbor Press, Cold Spring Harbor, New York). The polypeptides encoded by the polynucleotides are expressed in any expression system, including, for example,

bacterial, yeast, insect, amphibian and mammalian systems. Suitable vectors and host cells are described in U.S. Patent No. 5,654,173.

Bacteria. Expression systems in bacteria include those described in Chang *et al.*, *Nature* (1978) *275*:615, Goeddel *et al.*, *Nature* (1979) *281*:544, Goeddel *et al.*, *Nucleic Acids Res.* (1980) *8*:4057; EP 0 036,776, U.S. Patent No. 4,551,433, DeBoer *et al., Proc. Natl. Acad. Sci. (USA)* (1983) *80*:21-25, and Siebenlist *et al.*, *Cell* (1980) *20*:269.

Yeast. Expression systems in yeast include those described in Hinnen *et al., Proc. Natl. Acad. Sci. (USA)* (1978) *75*:1929; Ito *et al.*, *J. Bacteriol.* (1983) *153*:163; Kurtz *et al.*, *Mol. Cell. Biol.* (1986) *6*:142; Kunze *et al.*, *J. Basic Microbiol.* (1985) *25*:141; Gleeson *et al.*, *J. Gen. Microbiol.* (1986) *132*:3459, Roggenkamp *et al.*, *Mol. Gen. Genet.* (1986) *202*:302) Das *et al.*, *J. Bacteriol.* (1984) *158*:1165; De Louvencourt *et al.*, *J. Bacteriol.* (1983) *154*:737, Van den Berg *et al.*, *Bio/Technology* (1990) *8*:135; Kunze *et al.*, *J. Basic Microbiol.* (1985) *25*:141; Cregg *et al.*, *Mol. Cell. Biol.* (1985) *5*:3376, U.S. Patent Nos. 4,837,148 and 4,929,555; Beach and Nurse, *Nature* (1981) *300*:706; Davidow *et al.*, *Curr. Genet.* (1985) *10*:380, Gaillardin *et al.*, *Curr. Genet.* (1985) *10*:49, Ballance *et al.*, *Biochem. Biophys. Res. Commun.* (1983) *112*:284-289; Tilburn *et al.*, *Gene* (1983) *26*:205-221, Yelton *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1984) *81*:1470-1474, Kelly and Hynes, *EMBO J.* (1985) *4*:475479; EP 0 244,234, and WO 91/00357.

Insect Cells. Expression of heterologous genes in insects is accomplished as described in U.S. Patent No. 4,745,051, Friesen *et al.* (1986) "The Regulation of Baculovirus Gene Expression" in: The Molecular Biology Of Baculoviruses (W. Doerfler, ed.), EP 0 127,839, EP 0 155,476, and Vlak *et al.*, J. *Gen. Virol.* (1988) *69*:765-776, Miller *et al.*, *Ann. Rev. Microbiol.* (1988) *42*:177, Carbonell *et al.*, *Gene* (1988) *73*:409, Maeda *et al.*, *Nature* (1985) *315*:592-594, Lebacq-Verheyden *et al.*, *Mol. Cell. Biol.* (1988) *8*:3129; Smith *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1985) *82*:8404, Miyajima *et al.*, *Gene* (1987) *58*:273; and Martin *et al.*, *DNA* (1988) *7*:99. Numerous baculoviral strains and variants and corresponding permissive insect host cells from hosts are described in Luckow *et al.*, *Bio/Technology*

(1988) *6*:47-55, Miller *et al.*, Generic Engineering (Setlow, J.K. *et al.* eds.), Vol. 8 (Plenum Publishing, 1986), pp. 277-279, and Maeda *et al.*, *Nature*, (1985) *315*:592-594.

Mammalian Cells. Mammalian expression is accomplished as described in Dijkema *et al.*, *EMBO J.* (1985) *4*:761, Gorman *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1982) *79*:6777, Boshart *et al.*, *Cell* (1985) *41*:521 and U.S. Patent No. 4,399,216. Other features of mammalian expression are facilitated as described in Ham and Wallace, *Meth. Enz.* (1979) *58*:44, Barnes and Sato, *Anal. Biochem.* (1980) *102*:255, U.S. Patent Nos. 4,767,704, 4,657,866, 4,927,762, 4,560,655, WO 90/103430, WO 87/00195, and U.S. RE 30,985.

Polynucleotide molecules comprising the polynucleotide sequence are propagated by placing the molecule in a vector. Viral and non-viral vectors are used, including plasmids. The choice of plasmid will depend on the type of cell in which propagation is desired and the purpose of propagation. Certain vectors are useful for amplifying and making large amounts of the desired DNA sequence. Other vectors are suitable for expression in cells in culture. Still other vectors are suitable for transfer and expression in cells in a whole animal or person. The choice of appropriate vector is well within the skill of the art. Many such vectors are available commercially. The polynucleotide is inserted into a vector typically by means of DNA ligase attachment to a cleaved restriction enzyme site in the vector. Alternatively, the desired nucleotide sequence may be inserted by homologous recombination in vivo. Typically this is accomplished by attaching regions of homology to the vector on the flanks of the desired nucleotide sequence. Regions of homology are added by ligation of oligonucleotides, or by polymerase chain reaction using primers comprising both the region of homology and a portion of the desired nucleotide sequence, for example.

Polynucleotides are linked to regulatory sequences as appropriate to obtain the desired expression properties. These may include promoters (attached either at the 5' end of the sense strand or at the 3' end of the antisense strand), enhancers, terminators, operators, repressors, and inducers. The promoters may be regulated or constitutive. In some situations it may be desirable to use conditionally active promoters, such as tissue-specific or developmental stage-specific promoters. These are

linked to the desired nucleotide sequence using the techniques described above for linkage to vectors. Any techniques known in the art may be used.

When any of the above host cells, or other appropriate host cells or organisms, are used to replicate and/or express the polynucleotides or nucleic acids of the invention, the resulting replicated nucleic acid, RNA, expressed protein or polypeptide, is within the scope of the invention as a product of the host cell or organism. The product is recovered by any appropriate means known in the art.

Once the gene corresponding to the polypeptide is identified, its expression can be regulated in the cell to which the gene is native. For example, an endogenous gene of a cell can be regulated by an exogenous regulatory sequence as disclosed in U.S. Patent No. 5,641,670, "Protein Production and Protein Delivery."

Ribozymes

Trans-cleaving catalytic RNAs (ribozymes) are RNA molecules possessing endoribonuclease activity. Ribozymes are specifically designed for a particular target, and the target message must contain a specific nucleotide sequence. They are engineered to cleave any RNA species site-specifically in the background of cellular RNA. The cleavage event renders the mRNA unstable and prevents protein expression. Importantly, ribozymes can be used to inhibit expression of a gene of unknown function for the purpose of determining its function in an in vitro or in vivo context, by detecting the phenotypic effect.

One commonly used ribozyme motif is the hammerhead, for which the substrate sequence requirements are minimal. Design of the hammerhead ribozyme is disclosed in Usman *et al., Current Opin. Struct. Biol.* (1996) *6*:527-533. Usman also discusses the therapeutic uses of ribozymes. Ribozymes can also be prepared and used as described in Long *et al., FASEB J.* (1993) *7*:25; Symons, *Ann. Rev. Biochem.* (1992) *61*:641; Perrotta *et al., Biochem.* (1992) *31*:16-17; Ojwang *et al., Proc. Natl. Acad. Sci. (USA)* (1992) *89*:10802-10806; and U.S. Patent No. 5,254,678. Ribozyme cleavage of HIV-I RNA is described in U.S. Patent No. 5,144,019; methods of cleaving RNA using ribozymes is described in U.S. Patent No. 5,116,742; and methods for increasing the specificity of ribozymes are described in U.S. Patent No. 5,225,337 and Koizumi *et al.*,

Nucleic Acid Res. (1989) *17*:7059-7071. Preparation and use of ribozyme fragments in a hammerhead structure are also described by Koizumi *et al.*, *Nucleic Acids Res.* (1989) *17*:7059-7071. Preparation and use of ribozyme fragments in a hairpin structure are described by Chowrira and Burke, *Nucleic Acids Res.* (1992) *20*:2835. Ribozymes can also be made by rolling transcription as described in Daubendiek and Kool, *Nat. Biotechnol.* (1997) *15(3)*:273-277.

The hybridizing region of the ribozyme may be modified or may be prepared as a branched structure as described in Horn and Urdea, *Nucleic Acids Res.* (1989) *17*:6959-67. The basic structure of the ribozymes may also be chemically altered in ways familiar to those skilled in the art, and chemically synthesized ribozymes can be administered as synthetic oligonucleotide derivatives modified by monomeric units. In a therapeutic context, liposome mediated delivery of ribozymes improves cellular uptake, as described in Birikh *et al.*, *Eur. J. Biochem.* (1997) *245*:1-16.

Therapeutic and functional genomic applications of ribozymes proceed beginning with knowledge of a portion of the coding sequence of the gene to be inhibited. Thus, for many genes, a polynucleotide sequence as disclosed herein provides adequate sequence for constructing an effective ribozyme. A target cleavage site is selected in the target sequence, and a ribozyme is constructed based on the 5' and 3' nucleotide sequences that flank the cleavage site. Retroviral vectors are engineered to express monomeric and multimeric hammerhead ribozymes targeting the mRNA of the target coding sequence. These monomeric and multimeric ribozymes are tested in vitro for an ability to cleave the target mRNA. A cell line is stably transduced with the retroviral vectors expressing the ribozymes, and the transduction is confirmed by Northern blot analysis and reverse-transcription polymerase chain reaction (RT-PCR). The cells are screened for inactivation of the target mRNA by such indicators as reduction of expression of disease markers or reduction of the gene product of the target mRNA.

Antisense

Antisense nucleic acids are designed to specifically bind to RNA, resulting in the formation of RNA-DNA or RNA-RNA hybrids, with an arrest of DNA replication, reverse transcription or messenger RNA translation. Antisense polynucleotides based on a selected sequence can interfere with expression of the corresponding gene. Antisense polynucleotides are typically generated within the cell by expression from antisense constructs that contain the antisense EST strand as the transcribed strand. Antisense polynucleotides will bind and/or interfere with the translation of the corresponding mRNA. The expression products of control cells and cells treated with the antisense construct are compared to detect the protein product of the gene corresponding to the polynucleotide. The protein is isolated and identified using routine biochemical methods.

Antisense therapy for a variety of cancers is in clinical phase and has been discussed extensively in the literature. Reed reviewed antisense therapy directed at the Bcl-2 gene in tumors; gene transfer-mediated overexpression of Bcl-2 in tumor cell lines conferred resistance to many types of cancer drugs. (Reed, J.C., *N.C.I.* (1997) *89*:988-990). The potential for clinical development of antisense inhibitors of *ras* is discussed by Cowsert, L.M., *Anti-Cancer Drug Design* (1997) *12*:359-371. Additional important antisense targets include leukemia (Geurtz, A.M., *Anti-Cancer Drug Design* (1997) *12*:341-358); human C-ref kinase (Monia, B.P., *Anti-Cancer Drug Design* (1997) *12*:327-339); and protein kinase C (McGraw *et al., Anti-Cancer Drug Design* (1997) *12*:315-326.

Given the extensive background literature and clinical experience in antisense therapy, one skilled in the art can use selected polynucleotides of the invention as additional potential therapeutics. The choice of polynucleotide can be narrowed by first testing them for binding to "hot spot" regions of the genome of cancerous cells. If a polynucleotide is identified as binding to a "hot spot", testing the polynucleotide as an antisense compound in the corresponding cancer cells clearly is warranted.

Ogunbiyi *et al., Gastroenterology* (1997) *113(3)*:761-766 describe prognostic use of allelic loss in colon cancer; Barks *et al., Genes, Chromosomes, and*

Cancer (1997) *19(4)*:278-285 describe increased chromosome copy number detected by FISH in malignant melanoma; Nishizake *et al.*, *Genes, Chromosomes, and Cancer* (1997) *19(4)*:267-272 describe genetic alterations in primary breast cancer and their metastases and direct comparison using modified comparative genome hybridization; and Elo *et al.*, *Cancer Research* (1997) *57(16)*:3356-3359 disclose that loss of heterozygosity at 16z24.1-q24.2 is significantly associated with metastatic and aggressive behavior of prostate cancer.

Dominant Negative Mutations

Dominant negative mutations are readily generated for corresponding proteins that are active as homomultimers. A mutant polypeptide will interact with wild-type polypeptides (made from the other allele) and form a non-functional multimer. Thus, a mutation is in a substrate-binding domain, a catalytic domain, or a cellular localization domain. Preferably, the mutant polypeptide will be overproduced. Point mutations are made that have such an effect. In addition, fusion of different polypeptides of various lengths to the terminus of a protein can yield dominant negative mutants. General strategies are available for making dominant negative mutants. See Herskowitz, *Nature* (1987) *329*:219-222. Such a technique can be used for creating a loss of function mutation, which is useful for determining the function of a protein.

Identification of Secreted and Membrane-Bound Polypeptides

Both secreted and membrane-bound polypeptides of the present invention are of interest. For example, levels of secreted polypeptides can be assayed conveniently in body fluids, such as blood, urine, prostatic fluid and semen. Membrane-bound polypeptides are useful for constructing vaccine antigens or inducing an immune response. Such antigens would comprise all or part of the extracellular region of the membrane-bound polypeptides.

Because both secreted and membrane-bound polypeptides comprise a fragment of contiguous hydrophobic amino acids, hydrophobicity predicting algorithms can be used to identify such polypeptides.

A signal sequence is usually encoded by both secreted and membrane-bound polypeptide genes to direct a polypeptide to the surface of the cell. The signal

sequence usually comprises a stretch of hydrophobic residues. Such signal sequences can fold into helical structures.

Membrane-bound polypeptides typically comprise at least one transmembrane region that possesses a stretch of hydrophobic amino acids that can transverse the membrane. Some transmembrane regions also exhibit a helical structure.

Hydrophobic fragments within a polypeptide can be identified by using computer algorithms. Such algorithms include Hopp & Woods, Proc. Natl. Acad. Sci. USA 78: 3824-3828 (1981); Kyte & Doolittle, J. Mol. Biol. 157: 105-132 (1982); and RAOAR algorithm, Degli Esposti *et al.*, Eur. J. Biochem. 190: 207-219 (1990).

Another method of identifying secreted and membrane-bound polypeptides is to translate the present polynucleotides, SEQ ID NO:1-339, in all six frames and determine if at least 8 contiguous hydrophobic amino acids are present. Those translated polypeptides with at least 8; more typically, 10; even more typically, 12 contiguous hydrophobic amino acids are considered to be either a putative secreted or membrane bound polypeptide. Hydrophobic amino acids include alanine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, threonine, tryptophan, tyrosine, and valine.

Putative secreted and/or membrane-bound polypeptides are encoded by the sequences of the following clones: SL-5, SL-6, SL-9, SL-11, SL-13, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, and SL-177.

Construction of Polypeptides of the Invention and Variants Thereof

The polypeptides of the invention include those encoded by the disclosed polynucleotides. These polypeptides can also be encoded by nucleic acids that, by virtue of the degeneracy of the genetic code, are not identical in sequence to the disclosed polynucleotides. Thus, the invention includes within its scope nucleic acids comprising polynucleotides encoding a protein or polypeptide expressed by a polynucleotide having the sequence of any one of SEQ ID NO:1-339. Also within the scope of the invention are variants; variants of polypeptides include mutants, fragments, and fusions. Mutants can include amino acid substitutions, additions or deletions. The amino acid substitutions can be conservative amino acid substitutions or substitutions to

eliminate non-essential amino acids, such as to alter a glycosylation site, a phosphorylation site or an acetylation site, or to minimize misfolding by substitution or deletion of one or more cysteine residues that are not necessary for function. Conservative amino acid substitutions are those that preserve the general charge, hydrophobicity/hydrophilicity, and/or steric bulk of the amino acid substituted. For example, substitutions between the following groups are conservative: Gly/Ala, Val/Ile/Leu, Asp/Glu, Lys/Arg, Asn/Gln, Ser/Cys,Thr, and Phe/Trp/Tyr.

Cysteine-depleted muteins are variants within the scope of the invention. These variants can be constructed according to methods disclosed in U.S. Patent No. 4,959,314, "Cysteine-Depleted Muteins of Biologically Active Proteins." The patent discloses how to substitute other amino acids for cysteines, and how to determine biological activity and effect of the substitution. Such methods are suitable for proteins according to this invention that have cysteine residues suitable for such substitutions, for example to eliminate disulfide bond formation.

The protein variants described herein are encoded by polynucleotides that are within the scope of the invention. The genetic code can be used to select the appropriate codons to construct the corresponding variants.

The invention encompasses polynucleotide sequences having at least 65% sequence identity to any one of SEQ ID NOs:1-339 as determined by the Smith-Waterman homology search algorithm as implemented in MSPRCH program (Oxford Molecular) using an affine gap search with the following search parameters: gap open penalty of 12, and gap extension penalty of 1.

Use of the Polynucleotides as Probes, in Mapping, and in Tissue Profiling

Probes

Polynucleotide probes comprising at least 12 contiguous nucleotides selected from the nucleotide sequence of a polynucleotide of SEQ ID NO:1-339 are used for a variety of purposes, including identification of human chromosomes and determining transcription levels.

The nucleotide probes are labeled, for example, with a radioactive, fluorescent, biotinylated, or chemiluminescent label, and detected by well known

methods appropriate for the particular label selected. Protocols for hybridizing nucleotide probes to preparations of metaphase chromosomes are also well known in the art. A nucleotide probe will hybridize specifically to nucleotide sequences in the chromosome preparations which are complementary to the nucleotide sequence of the probe. A probe that hybridizes specifically to a polynucleotide should provide a detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with other unrelated sequences.

In a non-limiting example, commercial programs are available for identifying regions of chromosomes commonly associated with disease, such as cancer. Polynucleotides of the invention can be used to probe these regions. For example, if through profile searching a polynucleotide is identified as corresponding to a gene encoding a kinase, its ability to bind to a cancer-related chromosomal region will suggest its role as a kinase in one or more stages of tumor cell development/growth. Although some experimentation would be required to elucidate the role, the polynucleotide constitutes a new material for isolating a specific protein that has potential for developing a cancer diagnostic or therapeutic.

Nucleotide probes are used to detect expression of a gene corresponding to the polynucleotide. For example, in Northern blots, mRNA is separated electrophoretically and contacted with a probe. A probe is detected as hybridizing to an mRNA species of a particular size. The amount of hybridization is quantitated to determine relative amounts of expression, for example under a particular condition. Probes are also used to detect products of amplification by polymerase chain reaction. The products of the reaction are hybridized to the probe and hybrids are detected. Probes are used for in situ hybridization to cells to detect expression. Probes can also be used in vivo for diagnostic detection of hybridizing sequences. Probes are typically labeled with a radioactive isotope. Other types of detectable labels may be used such as chromophores, fluors, and enzymes.

Expression of specific mRNA can vary in different cell types and can be tissue specific. This variation of mRNA levels in different cell types can be exploited with nucleic acid probe assays to determine tissue types. For example, PCR, branched DNA probe assays, or blotting techniques utilizing nucleic acid probes substantially

identical or complementary to polynucleotides listed in the Sequence Listing can determine the presence or absence of cDNA or mRNA related to the polynucleotides of the invention.

Examples of a nucleotide hybridization assay are described in Urdea *et al.*, PCT WO92/02526 and Urdea *et al.*, U.S. Patent No. 5,124,246, both incorporated herein by reference. The references describe an example of a sandwich nucleotide hybridization assay.

Alternatively, the Polymerase Chain Reaction (PCR) is another means for detecting small amounts of target nucleic acids, as described in Mullis *et al.*, *Meth. Enzymol.* (1987) *155*:335-350; U.S. Patent No. 4,683,195; and U.S. Patent No. 4,683,202, all incorporated herein by reference. Two primer polynucleotides nucleotides hybridize with the target nucleic acids and are used to prime the reaction. The primers may be composed of sequence within or 3' and 5' to the polynucleotides of the Sequence Listing. Alternatively, if the primers are 3' and 5' to these polynucleotides, they need not hybridize to them or the complements. A thermostable polymerase creates copies of target nucleic acids from the primers using the original target nucleic acids as a template. After a large amount of target nucleic acids is generated by the polymerase, it is detected by methods such as Southern blots. When using the Southern blot method, the labeled probe will hybridize to a polynucleotide of the Sequence Listing or complement.

Furthermore, mRNA or cDNA can be detected by traditional blotting techniques described in Sambrook *et al.*, "Molecular Cloning: A Laboratory Manual" (New York, Cold Spring Harbor Laboratory, 1989). mRNA or cDNA generated from mRNA using a polymerase enzyme can be purified and separated using gel electrophoresis. The nucleic acids on the gel are then blotted onto a solid support, such as nitrocellulose. The solid support is exposed to a labeled probe and then washed to remove any unhybridized probe. Next, the duplexes containing the labeled probe are detected. Typically, the probe is labeled with radioactivity.

Mapping

Polynucleotides of the present invention are used to identify a chromosome on which the corresponding gene resides. Using fluorescence in situ hybridization (FISH) on normal metaphase spreads, comparative genomic hybridization allows total genome assessment of changes in relative copy number of DNA sequences. See Schwartz and Samad, *Current Opinions in Biotechnology* (1994) *8*:70-74; Kallioniemi *et al.*, *Seminars in Cancer Biology* (1993) *4*:41-46; Valdes and Tagle, *Methods in Molecular Biology* (1997) *68*:1, Boultwood, ed., Human Press, Totowa, NJ.

Preparations of human metaphase chromosomes are prepared using standard cytogenetic techniques from human primary tissues or cell lines. Nucleotide probes comprising at least 12 contiguous nucleotides selected from the nucleotide sequence shown in the Sequence Listing are used to identify the corresponding chromosome. The nucleotide probes are labeled, for example, with a radioactive, fluorescent, biotinylated, or chemiluminescent label, and detected by well known methods appropriate for the particular label selected. Protocols for hybridizing nucleotide probes to preparations of metaphase chromosomes are also well known in the art. A nucleotide probe will hybridize specifically to nucleotide sequences in the chromosome preparations that are complementary to the nucleotide sequence of the probe. A probe that hybridizes specifically to a polynucleotide-related gene provides a detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with non-EST coding sequences.

Polynucleotides are mapped to particular chromosomes using, for example, radiation hybrids or chromosome-specific hybrid panels. See Leach *et al.*, *Advances in Genetics*, (1995) *33*:63-99; Walter *et al.*, *Nature Genetics* (1994) *7*:22-28; Walter and Goodfellow, *Trends in Genetics* (1992) *9*:352. Such mapping can be useful in identifying the function of the polynucleotide-related gene by its proximity to other genes with known function. Function can also be assigned to the related gene when particular syndromes or diseases map to the same chromosome.

Tissue Profiling

The polynucleotides of the present invention can be used to determine the tissue type from which a given sample is derived. For example, a metastatic lesion

is identified by its developmental organ or tissue source by identifying the expression of a particular marker of that organ or tissue. If a polynucleotide is expressed only in a specific tissue type, and a metastatic lesion is found to express that polynucleotide, then the developmental source of the lesion has been identified. Expression of a particular polynucleotide is assayed by detection of either the corresponding mRNA or the protein product. Immunological methods, such as antibody staining, are used to detect a particular protein product. Hybridization methods may be used to detect particular mRNA species, including but not limited to in situ hybridization and Northern blotting.

Use of Polymorphisms

A polynucleotide will be useful in forensics, genetic analysis, mapping, and diagnostic applications if the corresponding region of a gene is polymorphic in the human population. A particular polymorphic form of the polynucleotide may be used to either identify a sample as deriving from a suspect or rule out the possibility that the sample derives from the suspect. Any means for detecting a polymorphism in a gene are used, including but not limited to electrophoresis of protein polymorphic variants, differential sensitivity to restriction enzyme cleavage, and hybridization to an allele-specific probe.

Use of Polynucleotides to Raise Antibodies

Expression products of a polynucleotide, the corresponding mRNA or cDNA, or the corresponding complete gene are prepared and used for raising antibodies for experimental, diagnostic, and therapeutic purposes. The polynucleotide or related cDNA is expressed as described above, and antibodies are prepared. These antibodies are specific to an epitope on the polynucleotide-encoded polypeptide, and can precipitate or bind to the corresponding native protein in a cell or tissue preparation or in a cell-free extract of an in vitro expression system.

Immunogens for raising antibodies are prepared by mixing the polypeptides encoded by the polynucleotide of the present invention with adjuvants. Alternatively, polypeptides are made as fusion proteins to larger immunogenic proteins. Polypeptides are also covalently linked to other larger immunogenic proteins, such as keyhole limpet hemocyanin. Immunogens are typically administered intradermally,

subcutaneously, or intramuscularly. Immunogens are administered to experimental animals such as rabbits, sheep, and mice, to generate antibodies. Optionally, the animal spleen cells are isolated and fused with myeloma cells to form hybridomas which secrete monoclonal antibodies. Such methods are well known in the art. According to another method known in the art, the polynucleotide is administered directly, such as by intramuscular injection, and expressed in vivo. The expressed protein generates a variety of protein-specific immune responses, including production of antibodies, comparable to administration of the protein.

Preparations of polyclonal and monoclonal antibodies specific for polynucleotide-encoded proteins and polypeptides are made using standard methods known in the art. The antibodies specifically bind to epitopes present in the polypeptides encoded by polynucleotides disclosed in the Sequence Listing. Typically, at least 6, 8, 10, or 12 contiguous amino acids are required to form an epitope. However, epitopes which involve non-contiguous amino acids may require more, for example at least 15, 25, or 50 amino acids. A short sequence of a polynucleotide may then be unsuitable for use as an epitope to raise antibodies for identifying the corresponding novel protein, because of the potential for cross-reactivity with a known protein. However, the antibodies may be useful for other purposes, particularly if they identify common structural features of a known protein and a novel polypeptide encoded by a polynucleotide of the invention.

Antibodies that specifically bind to human polynucleotide-encoded polypeptides should provide a detection signal at least 5-, 10-, or 20-fold higher than a detection signal provided with other proteins when used in Western blots or other immunochemical assays. Preferably, antibodies that specifically bind polypeptides do not detect other proteins in immunochemical assays and can immunoprecipitate EST-encoded proteins from solution. For such immunoassays, any type of samples can be used, including tissue, organs, cells, urine, blood, prostatic fluid or semen.

Of interest are antibodies to the secreted polypeptides encoded by the present polynucleotide sequences, SEQ ID NO:1-339. Antibodies to secreted polypeptides can be used to test body fluids, such as blood, urine, prostatic fluid and semen.

To test for the presence of serum antibodies to the polypeptide in a human population, human antibodies are purified by methods well known in the art. Preferably, the antibodies are affinity purified by passing antiserum over a column to which a protein, polypeptide, or fusion protein is bound. The bound antibodies can then be eluted from the column, for example using a buffer with a high salt concentration.

In addition to the antibodies discussed above, genetically engineered antibody derivatives are made, such as single chain antibodies or humanized antibodies.

Antibodies to the polypeptides encoded by one or more of SEQ ID NO:1-339 also are contemplated for therapeutic compositions and uses. For example, antibodies directed to membrane-bound polypeptides that are up-regulated in cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations can be constructed. Antibodies can provide a useful therapeutic in inhibiting cell growth or inducing an immune reaction to cancer, tumor, or hyperproliferating cells. Typically, such antibodies are directed the extracellular regions of the membrane-bound polypeptide. The borders of such regions can be determined by identifying the location of the hydrophobic transmembrane fragment(s) in the encoded polypeptides of the present invention.

Exemplary antibodies were prepared using two sequences from clone SL-5: H_2N-CGPRLPSFPCPTHEPSTGQLSK-$CONH_2$ and H_2N-CKDSQGLSDFKR-NSRTTRRSYKCCONH$_2$. Using polyclonal antibodies raised against a mixture of these polypeptides, immunohistochemistry was performed on a variety of tumor tissues and corresponding normal tissue. The results are shown in Figure 3, and discussed in the Examples. These polypeptides are useful for detecting a higher level of expression of clone SL-5 in tumor tissues.

Use of Polynucleotides to Construct Arrays for Diagnostics

The present polynucleotide sequences and gene products are useful for determining the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations. Specifically, the polynucleotides and encoded polypeptides of the instant invention can be utilized to

determine the occurrence of prostatic disorders, such as BPH or localized prostate cancer.

A number of prostatic disorders exist, including adenocarcinoma, BPH, histologic prostate cancer, prostatic intraepithelial neoplasia, clinical prostate cancer, incidental prostate cancer, and localized prostate cancer. BPH is a common prostatic disorder in men which becomes clinically manifest usually after age fifty. In BPH, hyperplastic growth of prostatic cells in the periurethral glandular tissue in the central zone of the prostate gland cause an enlarged prostate which can compress or elongate the urethra and produce symptoms of urethral obstruction that may progress to urinary retention or to a constellation of symptoms known as prostatism. A host of physical manifestations can accompany prostatic disorders including: impotency, reduced urinary flow, hesitancy in initiating voiding, postvoid dribbling, a sensation of incomplete bladder emptying, and development of bladder or high urinary tract infections.

To determine the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations, the levels of polynucleotides and/or encoded polypeptides of the present invention in a sample are compared to the levels in a normal control of body tissues, cells, organs, or fluids. The normal control can include a pool of cells from a particular organ or tissue or tissues and/or cells from throughout the body. Either the immunoassays described above or the nucleic acid assays described below can be used for such measurements.

Any observed difference between the sample and normal control can indicate the occurrence of disease or disorder. Typically, if the levels of the polynucleotides and the encoded polypeptides of the present invention are higher than those found in the normal control, the results indicate the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations.

In addition, the present polynucleotides can be useful to diagnose the severity as well as the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations, including prostatic disorders. For example, the greater the difference observed in the sample versus the

normal control of the present polynucleotides or encoded polypeptides, the greater the severity of the disorder, in particular, when higher levels as compared to a normal control are observed.

The present polynucleotides, as shown in SEQ ID NO:1-339, were expressed at higher levels in a prostate cancer cell line versus a normal prostate epithelial cell line.

Polynucleotide arrays provide a high throughput technique that can assay a large number of polynucleotide sequences in a sample. This technology can be used as a diagnostic and as a tool to test for differential expression to determine function of an encoded protein.

To create arrays, polynucleotide probes are spotted onto a substrate in a two-dimensional matrix or array. Samples of polynucleotides can be labeled and then hybridized to the probes. Double stranded polynucleotides, comprising the labeled sample polynucleotides bound to probe polynucleotides, can be detected once the unbound portion of the sample is washed away.

The probe polynucleotides can be spotted on substrates including glass, nitrocellulose, etc. The probes can be bound to the substrate by either covalent bonds or by non-specific interactions, such as hydrophobic interactions. The sample polynucleotides can be labeled using radioactive labels, fluorophors, etc.

Techniques for constructing arrays and methods of using these arrays are described in EP No. 0 799 897; PCT No. WO 97/29212; PCT No. WO 97/27317; EP No. 0 785 280; PCT No. WO 97/02357; U.S. Pat. No. 5,593,839; U.S. Pat. No. 5,578,832; EP No. 0 728 520; U.S. Pat. No. 5,599,695; EP No. 0 721 016; U.S. Pat. No. 5,556,752; PCT No. WO 95/22058; and U.S. Pat. No. 5,631,734.

Further, arrays can be used to examine differential expression of genes and can be used to determine gene function. For example, arrays of the instant polynucleotide sequences can be used to determine if any of the EST sequences are differentially expressed between normal cells and cancer cells, for example. High expression of a particular message in a cancer cell, which is not observed in a corresponding normal cell, can indicate a cancer specific protein.

Differential Expression

The present invention also provides a method to identify abnormal or diseased tissue in a human. For polynucleotides corresponding to profiles of protein families as described above, the choice of tissue may be dictated by the putative biological function. The expression of a gene corresponding to a specific polynucleotide is compared between a first tissue that is suspected of being diseased and a second, normal tissue of the human. The normal tissue is any tissue of the human, especially those that express the polynucleotide-related gene including, but not limited to, brain, thymus, testis, heart, prostate, placenta, spleen, small intestine, skeletal muscle, pancreas, and the mucosal lining of the colon.

The polynucleotide-related genes in the two tissues are compared by any means known in the art. For example, the two genes are sequenced, and the sequence of the gene in the tissue suspected of being diseased is compared with the gene sequence in the normal tissue. The polynucleotide-related genes, or portions thereof, in the two tissues are amplified, for example using nucleotide primers based on the nucleotide sequence shown in the Sequence Listing, using the polymerase chain reaction. The amplified genes or portions of genes are hybridized to nucleotide probes selected from the same nucleotide sequence shown in the Sequence Listing. A difference in the nucleotide sequence of the polynucleotide-related gene in the tissue suspected of being diseased compared with the normal nucleotide sequence suggests a role of the polynucleotide-encoded proteins in the disease, and provides a lead for preparing a therapeutic agent. The nucleotide probes are labeled by a variety of methods, such as radiolabeling, biotinylation, or labeling with fluorescent or chemiluminescent tags, and detected by standard methods known in the art.

Alternatively, polynucleotide-related mRNA in the two tissues is compared. PolyA$^+$ RNA is isolated from the two tissues as is known in the art. For example, one of skill in the art can readily determine differences in the size or amount of polynucleotide-related mRNA transcripts between the two tissues using Northern blots and nucleotide probes selected from the nucleotide sequence shown in the Sequence Listing. Increased or decreased expression of an polynucleotide-related mRNA in a tissue sample suspected of being diseased, compared with the expression of

the same polynucleotide-related mRNA in a normal tissue, suggests that the expressed protein has a role in the disease, and also provides a lead for preparing a therapeutic agent.

Any method for analyzing proteins is used to compare two polynucleotide-encoded proteins from matched samples. The sizes of the proteins in the two tissues are compared, for example, using antibodies of the present invention to detect polynucleotide-encoded proteins in Western blots of protein extracts from the two tissues. Other changes, such as expression levels and subcellular localization, can also be detected immunologically, using antibodies to the corresponding protein. A higher or lower level of polynucleotide-encoded protein expression in a tissue suspected of being diseased, compared with the same polynucleotide-encoded protein expression level in a normal tissue, is indicative that the expressed protein has a role in the disease, and provides another lead for preparing a therapeutic agent.

Similarly, comparison of polynucleotide gene sequences or of polynucleotide gene expression products, e.g., mRNA and protein, between a human tissue that is suspected of being diseased and a normal tissue of a human, are used to follow disease progression or remission in the human. Such comparisons of polynucleotide-related genes, mRNA, or protein are made as described above.

For example, increased or decreased expression of the polynucleotide-related gene in the tissue suspected of being neoplastic can indicate the presence of neoplastic cells in the tissue. The degree of increased expression of the polynucleotide gene in the neoplastic tissue relative to expression of the gene in normal tissue, or differences in the amount of increased expression of the polynucleotide gene in the neoplastic tissue over time, is used to assess the progression of the neoplasia in that tissue or to monitor the response of the neoplastic tissue to a therapeutic protocol over time. The expression pattern of any two cell types can be compared, such as low and high metastatic tumor cell lines, or cells from tissue which have and have not been exposed to a therapeutic agent.

Screening for Peptide Analogs and Antagonists

Polypeptides encoded by the instant polynucleotides and corresponding full length genes can be used to screen peptide libraries to identify binding partners, such as receptors, from among the encoded polypeptides.

Such binding partners can be useful in treating cancer, tumor progression, hyperproliferative cell growth, and/or accompanying biological or physical manifestations. For example, peptides or other compounds that are capable of binding or interacting with membrane-bound polypeptides encoded by one or more of SEQ ID NO:1-339, can be useful as a therapeutic. Also, peptides or other compounds capable of altering the conformation of any of the encoded polypeptides by one or more of SEQ ID NO:1-339 can inhibit biological activity and be useful as a therapeutic.

A library of peptides may be synthesized following the methods disclosed in U.S. Pat. No. 5,010,175, and in PCT WO91/17823.

Peptide agonists or antagonists are screened using any available method, such as signal transduction, antibody binding, receptor binding, mitogenic assays, chemotaxis assays, etc. The methods described herein are presently preferred. The assay conditions ideally should resemble the conditions under which the native activity is exhibited *in vivo*, that is, under physiologic pH, temperature, and ionic strength. Suitable agonists or antagonists will exhibit strong inhibition or enhancement of the native activity at concentrations that do not cause toxic side effects in the subject. Agonists or antagonists that compete for binding to the native polypeptide may require concentrations equal to or greater than the native concentration, while inhibitors capable of binding irreversibly to the polypeptide may be added in concentrations on the order of the native concentration.

The end results of such screening and experimentation will be at least one novel polypeptide binding partner, such as a receptor, encoded by a cDNA polynucleotide or gene of the invention, and at least one peptide agonist or antagonist of the novel binding partner. Such agonists and antagonists can be used to modulate, enhance, or inhibit receptor function in cells to which the receptor is native, or in cells that possess the receptor as a result of genetic engineering. Further, if the novel receptor shares biologically important characteristics with a known receptor,

information about agonist/antagonist binding may help in developing improved agonists/antagonists of the known receptor.

Therapeutics, whether polynucleotide or polypeptide or small molecule, can be tested, for example, in the mouse tumor assay described in Pei *et al.*, Mol. Endo. 11: 433-441 (1997).

Other models for testing polynucleotides, polypeptides, antibodies, or small molecules useful for treatment include: animal models and cell lines disclosed in Bosland, *Encyclopedia of Cancer*, Volume II, pages 1283 to 1296 (1997) by Academic Press. Other useful cell lines are described in Brothman, *Encyclopedia of Cancer*, Volume II, pages 1303 to 1313 (1997) by Academic Press

Pharmaceutical Compositions and Therapeutic Uses

Pharmaceutical compositions can comprise polypeptides, antibodies, or polynucleotides of the claimed invention. The pharmaceutical compositions will comprise a therapeutically effective amount of either polypeptides, antibodies, or polynucleotides of the claimed invention.

The term "therapeutically effective amount" as used herein refers to an amount of a therapeutic agent to treat, ameliorate, or prevent a desired disease or condition, or to exhibit a detectable therapeutic or preventative effect. The effect can be detected by, for example, chemical markers or antigen levels. Therapeutic effects also include reduction in physical symptoms, such as decreased body temperature. The precise effective amount for a subject will depend upon the subject's size and health, the nature and extent of the condition, and the therapeutics or combination of therapeutics selected for administration. Thus, it is not useful to specify an exact effective amount in advance. However, the effective amount for a given situation can be determined by routine experimentation and is within the judgment of the clinician. Specifically, the compositions of the present invention can be used to treat, ameliorate, modulate, or prevent cancer, tumor progression, hyperproliferative cell growth and/or accompanying biological or physical manifestations, including prostatic disorders.

For purposes of the present invention, an effective dose will be from about 0.01 mg/ kg to 50 mg/kg or 0.05 mg/kg to about 10 mg/kg of the polynucleotide, polypeptide or antibody compositions in the individual to which it is administered.

A pharmaceutical composition can also contain a pharmaceutically acceptable carrier. The term "pharmaceutically acceptable carrier" refers to a carrier for administration of a therapeutic agent, such as antibodies or a polypeptide, genes, and other therapeutic agents. The term refers to any pharmaceutical carrier that does not itself induce the production of antibodies harmful to the individual receiving the composition, and which may be administered without undue toxicity. Suitable carriers may be large, slowly metabolized macromolecules such as proteins, polysaccharides, polylactic acids, polyglycolic acids, polymeric amino acids, amino acid copolymers, and inactive virus particles. Such carriers are well known to those of ordinary skill in the art.

Pharmaceutically acceptable salts can be used therein, for example, mineral acid salts such as hydrochlorides, hydrobromides, phosphates, sulfates, and the like; and the salts of organic acids such as acetates, propionates, malonates, benzoates, and the like. A thorough discussion of pharmaceutically acceptable excipients is available in *Remington's Pharmaceutical Sciences* (Mack Pub. Co., N.J. 1991).

Pharmaceutically acceptable carriers in therapeutic compositions may contain liquids such as water, saline, glycerol and ethanol. Additionally, auxiliary substances, such as wetting or emulsifying agents, pH buffering substances, and the like, may be present in such vehicles. Typically, the therapeutic compositions are prepared as injectables, either as liquid solutions or suspensions; solid forms suitable for solution in, or suspension in, liquid vehicles prior to injection may also be prepared. Liposomes are included within the definition of a pharmaceutically acceptable carrier.

Delivery Methods

Once formulated, the polynucleotide compositions of the invention can be (1) administered directly to the subject; (2) delivered ex vivo, to cells derived from the subject; or (3) delivered in vitro for expression of recombinant proteins.

Direct delivery of the compositions will generally be accomplished by injection, either subcutaneously, intraperitoneally, intravenously or intramuscularly, or delivered to the interstitial space of a tissue. The compositions can also be administered into a tumor or lesion. Other modes of administration include oral and pulmonary administration, suppositories, and transdermal applications, needles, and gene guns or hyposprays. Dosage treatment may be a single dose schedule or a multiple dose schedule.

Methods for the ex vivo delivery and reimplantation of transformed cells into a subject are known in the art and described in e.g., International Publication No. WO 93/14778. Examples of cells useful in ex vivo applications include, for example, stem cells, particularly hematopoetic, lymph cells, macrophages, dendritic cells, or tumor cells.

Generally, delivery of nucleic acids for both ex vivo and in vitro applications can be accomplished by, for example, dextran-mediated transfection, calcium phosphate precipitation, polybrene mediated transfection, protoplast fusion, electroporation, encapsulation of the polynucleotide(s) in liposomes, and direct microinjection of the DNA into nuclei, all well known in the art.

If a polynucleotide-related gene correlates with a proliferative disorder, such as neoplasia, dysplasia, and hyperplasia, the disorder may be amenable to treatment by administration of a therapeutic agent based on the polynucleotide or corresponding polypeptide.

Preparation of antisense polypeptides is discussed above. Neoplasias that are treated with the antisense composition include, but are not limited to, cervical cancers, melanomas, colorectal adenocarcinomas, Wilms' tumor, retinoblastoma, sarcomas, myosarcomas, lung carcinomas, leukemias, such as chronic myelogenous leukemia, promyelocytic leukemia, monocytic leukemia, and myeloid leukemia, and lymphomas, such as histiocytic lymphoma. Proliferative disorders that are treated with the therapeutic composition include disorders such as anhydric hereditary ectodermal dysplasia, congenital alveolar dysplasia, epithelial dysplasia of the cervix, fibrous dysplasia of bone, and mammary dysplasia. Hyperplasias, for example, endometrial, adrenal, breast, prostate, or thyroid hyperplasias or pseudoepitheliomatous hyperplasia

of the skin, are treated with antisense therapeutic compositions. Even in disorders in which mutations in the corresponding gene are not implicated, downregulation or inhibition of gene expression can have therapeutic application. For example, decreasing gene expression can help to suppress tumors in which enhanced expression of the gene is implicated.

Both the dose of the antisense composition and the means of administration are determined based on the specific qualities of the therapeutic composition, the condition, age, and weight of the patient, the progression of the disease, and other relevant factors. Administration of the therapeutic antisense agents of the invention includes local or systemic administration, including injection, oral administration, particle gun or catheterized administration, and topical administration. Preferably, the therapeutic antisense composition contains an expression construct comprising a promoter and a polynucleotide segment of at least 12, 22, 25, 30, or 35 contiguous nucleotides of the antisense strand. Within the expression construct, the polynucleotide segment is located downstream from the promoter, and transcription of the polynucleotide segment initiates at the promoter.

Various methods are used to administer the therapeutic composition directly to a specific site in the body. For example, a small metastatic lesion is located and the therapeutic composition injected several times in several different locations within the body of tumor. Alternatively, arteries which serve a tumor are identified, and the therapeutic composition injected into such an artery, in order to deliver the composition directly into the tumor. A tumor that has a necrotic center is aspirated and the composition injected directly into the now empty center of the tumor. The antisense composition is directly administered to the surface of the tumor, for example, by topical application of the composition. X-ray imaging is used to assist in certain of the above delivery methods.

Receptor-mediated targeted delivery of therapeutic compositions containing an antisense polynucleotide, subgenomic polynucleotides, or antibodies to specific tissues is also used. Receptor-mediated DNA delivery techniques are described in, for example, Findeis *et al.*, *Trends in Biotechnol.* (1993) *11*:202-205; Chiou *et al.*, (1994) Gene Therapeutics: Methods And Applications Of Direct Gene Transfer (J.A.

Wolff, ed.); Wu & Wu, *J. Biol. Chem.* (1988) *263*:621-24; Wu *et al.*, *J. Biol. Chem.* (1994) *269*:542-46; Zenke *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1990) *87*:3655-59; Wu *et al.*, *J. Biol. Chem.* (1991) *266*:339-42. Preferably, receptor-mediated targeted delivery of therapeutic compositions containing antibodies of the invention is used to deliver the antibodies to specific tissue.

Therapeutic compositions containing antisense subgenomic polynucleotides are administered in a range of about 100 ng to about 200 mg of polynucleotides for local administration in a gene therapy protocol. Concentration ranges of about 500 ng to about 50 mg, about 1 μg to about 2 mg, about 5 μg to about 500 μg, and about 20 μg to about 100 μg of polynucleotides can also be used during a gene therapy protocol. Factors such as method of action and efficacy of transformation and expression are considerations which will affect the dosage required for ultimate efficacy of the antisense subgenomic polynucleotides. Where greater expression is desired over a larger area of tissue, larger amounts of EST antisense subgenomic polynucleotides or the same amounts readministered in a successive protocol of administrations, or several administrations to different adjacent or close tissue portions of, for example, a tumor site, may be required to effect a positive therapeutic outcome. In all cases, routine experimentation in clinical trials will determine specific ranges for optimal therapeutic effect. A more complete description of gene therapy vectors, especially retroviral vectors, is contained in U.S. Serial No. 08/869,309, which is expressly incorporated herein, and in section G below.

For genes encoding polypeptides or proteins with anti-inflammatory activity, suitable use, doses, and administration are described in U.S. Patent No. 5,654,173, incorporated herein by reference. Therapeutic agents also include antibodies to proteins and polypeptides, as described in U.S. Patent No. 5,654,173.

Gene Therapy

The therapeutic polynucleotides and polypeptides of the present invention may be utilized in gene delivery vehicles. The gene delivery vehicle may be of viral or non-viral origin (see generally, Jolly, *Cancer Gene Therapy* (1994) *1*:51-64; Kimura, *Human Gene Therpay* (1994) *5*:845-852; Connelly, *Human Gene Therapy*

(1995) *1*:185-193; and Kaplitt, *Nature Genetics* (1994) *6*:148-153). Gene therapy vehicles for delivery of constructs including a coding sequence of a therapeutic of the invention can be administered either locally or systemically. These constructs can utilize viral or non-viral vector approaches. Expression of such coding sequences can be induced using endogenous mammalian or heterologous promoters. Expression of the coding sequence can be either constitutive or regulated.

The present invention can employ recombinant retroviruses which are constructed to carry or express a selected nucleic acid molecule of interest. Retrovirus vectors that can be employed include those described in EP 0 415 731; WO 90/07936; WO 94/03622; WO 93/25698; WO 93/25234; U.S. Patent No. 5, 219,740; WO 93/11230; WO 93/10218; Vile and Hart, *Cancer Res.* (1993) *53*:3860-3864; Vile and Hart, *Cancer Res.* (1993) *53*:962-967; Ram et al., *Cancer Res.* (1993) *53*:83-88; Takamiya et al., J. *Neurosci. Res.* (1992) *33*:493-503; Baba et al., *J. Neurosurg.* (1993) *79*:729-735; U.S. Patent no. 4,777,127; GB Patent No. 2,200,651; and EP 0 345 242. Preferred recombinant retroviruses include those described in WO 91/02805.

Packaging cell lines suitable for use with the above-described retroviral vector constructs may be readily prepared (see PCT publications WO 95/30763 and WO 92/05266), and used to create producer cell lines (also termed vector cell lines) for the production of recombinant vector particles. Within particularly preferred embodiments of the invention, packaging cell lines are made from human (such as HT1080 cells) or mink parent cell lines, thereby allowing production of recombinant retroviruses that can survive inactivation in human serum.

The present invention also employs alphavirus-based vectors that can function as gene delivery vehicles. Such vectors can be constructed from a wide variety of alphaviruses, including, for example, Sindbis virus vectors, Semliki forest virus (ATCC VR-67; ATCC VR-1247), Ross River virus (ATCC VR-373; ATCC VR-1246) and Venezuelan equine encephalitis virus (ATCC VR-923; ATCC VR-1250; ATCC VR 1249; ATCC VR-532). Representative examples of such vector systems include those described in U.S. Patent Nos. 5,091,309; 5,217,879; and 5,185,440; and PCT Publication Nos. WO 92/10578; WO 94/21792; WO 95/27069; WO 95/27044; and WO 95/07994.

Gene delivery vehicles of the present invention can also employ parvovirus such as adeno-associated virus (AAV) vectors. Representative examples include the AAV vectors disclosed by Srivastava in WO 93/09239, Samulski et al., *J. Vir.* (1989) *63*:3822-3828; Mendelson et al., *Virol.* (1988) *166*:154-165; and Flotte et al., *PNAS* (1993) *90*:10613-10617.

Representative examples of adenoviral vectors include those described by Berkner, *Biotechniques* (1988) *6*:616-627; Rosenfeld et al., *Science* (1991) *252*:431-434; WO 93/19191; Kolls et al., *PNAS* (1994) *91*:215-219; Kass-Eisler et al., *PNAS* (1993) *90*:11498-11502; Guzman et al., *Circulation* (1993) *88*:2838-2848; Guzman et al., *Cir. Res.* (1993) *73*:1202-1207; Zabner et al., *Cell* (1993) *75*:207-216; Li et al., *Hum. Gene Ther.* (1993) *4*:403-409; Cailaud et al., *Eur. J. Neurosci.* (1993) *5*:1287-1291; Vincent et al., *Nat. Genet.* (1993) *5*:130-134; Jaffe et al., *Nat. Genet.* (1992) *1*:372-378; and Levrero et al., *Gene* (1991) *101*:195-202. Exemplary adenoviral gene therapy vectors employable in this invention also include those described in WO 94/12649, WO 93/03769; WO 93/19191; WO 94/28938; WO 95/11984 and WO 95/00655. Administration of DNA linked to killed adenovirus as described in Curiel, *Hum. Gene Ther.* (1992) *3*:147-154 may be employed.

Other gene delivery vehicles and methods may be employed, including polycationic condensed DNA linked or unlinked to killed adenovirus alone, for example Curiel, *Hum. Gene Ther.* (1992) *3*:147-154; ligand linked DNA, for example see Wu, *J. Biol. Chem.* (1989) *264*:16985-16987; eukaryotic cell delivery vehicles cells, for example see U.S. Serial No. 08/240,030, filed May 9, 1994, and U.S. Serial No. 08/404,796; deposition of photopolymerized hydrogel materials; hand-held gene transfer particle gun, as described in U.S. Patent No. 5,149,655; ionizing radiation as described in U.S. Patent No. 5,206,152 and in WO92/11033; nucleic charge neutralization or fusion with cell membranes. Additional approaches are described in Philip, *Mol. Cell Biol.* (1994) *14*:2411-2418, and in Woffendin, *Proc. Natl. Acad. Sci.* (1994) *91*:1581-1585.

Naked DNA may also be employed. Exemplary naked DNA introduction methods are described in WO 90/11092 and U.S. Patent No. 5,580,859.

Further non-viral delivery suitable for use includes mechanical delivery systems such as the approach described in Woffendin *et al.*, *Proc. Natl. Acad. Sci. USA* (1994) *91*(24):11581-11585.

Computer-Related Embodiments

In general, a library of polynucleotides is a collection of sequence information, which information is provided in either biochemical form (*e.g.*, as a collection of polynucleotide molecules), or in electronic form (*e.g.*, as a collection of polynucleotide sequences stored in a computer-readable form, as in a computer system and/or as part of a computer program). The sequence information of the polynucleotides can be used in a variety of ways, *e.g.*, as a resource for gene discovery, as a representation of sequences expressed in a selected cell type (*e.g.*, cell type markers), and/or as markers of a given disease or disease state. In general, a disease marker is a representation of a gene product that is present in all cells affected by disease either at an increased or decreased level relative to a normal cell (*e.g.*, a cell of the same or similar type that is not substantially affected by disease).

The nucleotide sequence information of the library can be embodied in any suitable form, *e.g.*, electronic or biochemical forms. For example, a library of sequence information embodied in electronic form comprises an accessible computer data file (or, in biochemical form, a collection of nucleic acid molecules) that contains the representative nucleotide sequences of genes that are differentially expressed (*e.g.*, overexpressed or underexpressed) as between, for example, a cancerous cell and a normal cell. Biochemical embodiments of the library include a collection of nucleic acids that have the sequences of the genes in the library, where the nucleic acids can correspond to the entire gene in the library or to a fragment thereof, as described in greater detail below.

The polynucleotide libraries of the subject invention generally comprise sequence information of a plurality of polynucleotide sequences, where at least one of the polynucleotides has a sequence of any of SEQ ID NOs:1-339. By plurality is meant at least 2, usually at least 3 and can include up to all of SEQ ID NOs:1-339. The length and number of polynucleotides in the library will vary with the nature of the library,

e.g., if the library is an oligonucleotide array, a cDNA array, a computer database of the sequence information, etc.

Where the library is an electronic library, the nucleic acid sequence information can be present in a variety of media. "Media" refers to a manufacture, other than an isolated nucleic acid molecule, that contains the sequence information of the present invention. Such a manufacture provides the genome sequence or a subset thereof in a form that can be examined by means not directly applicable to the sequence as it exists in a nucleic acid. For example, the nucleotide sequence of the present invention, *e.g.*, the nucleic acid sequences of any of the polynucleotides of SEQ ID NOs:1-339, can be recorded on computer readable media, *e.g.*, any medium that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as a floppy disc, a hard disc storage medium, and a magnetic tape; optical storage media such as CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media. One of skill in the art can readily appreciate how any of the presently known computer readable mediums can be used to create a manufacture comprising a recording of the present sequence information. "Recorded" refers to a process for storing information on computer readable medium, using any such methods as known in the art. Any convenient data storage structure can be chosen, based on the means used to access the stored information. A variety of data processor programs and formats can be used for storage, *e.g.*, word processing text file, database format, *etc.* In addition to the sequence information, electronic versions of the libraries of the invention can be provided in conjunction or connection with other computer-readable information and/or other types of computer-readable files (*e.g.*, searchable files, executable files, *etc*, including, but not limited to, for example, search program software, *etc.*).

By providing the nucleotide sequence in computer readable form, the information can be accessed for a variety of purposes. Computer software to access sequence information is publicly available. For example, the BLAST (Altschul et al., *supra.*) and BLAZE (Brutlag et al. *Comp. Chem.* (1993) 17:203) search algorithms on a Sybase system can be used to identify open reading frames (ORFs) within the genome that contain homology to ORFs from other organisms.

As used herein, "a computer-based system" refers to the hardware means, software means, and data storage means used to analyze the nucleotide sequence information of the present invention. The minimum hardware of the computer-based systems of the present invention comprises a central processing unit (CPU), input means, output means, and data storage means. A skilled artisan can readily appreciate that any one of the currently available computer-based system are suitable for use in the present invention. The data storage means can comprise any manufacture comprising a recording of the present sequence information as described above, or a memory access means that can access such a manufacture.

"Search means" refers to one or more programs implemented on the computer-based system, to compare a target sequence or target structural motif, or expression levels of a polynucleotide in a sample, with the stored sequence information. Search means can be used to identify fragments or regions of the genome that match a particular target sequence or target motif. A variety of known algorithms are publicly known and commercially available, *e.g.*, MacPattern (EMBL), BLASTN and BLASTX (NCBI). A "target sequence" can be any polynucleotide or amino acid sequence of six or more contiguous nucleotides or two or more amino acids, preferably from about 10 to 100 amino acids or from about 30 to 300 nt A variety of comparing means can be used to accomplish comparison of sequence information from a sample (*e.g.*, to analyze target sequences, target motifs, or relative expression levels) with the data storage means. A skilled artisan can readily recognize that any one of the publicly available homology search programs can be used as the search means for the computer based systems of the present invention to accomplish comparison of target sequences and motifs. Computer programs to analyze expression levels in a sample and in controls are also known in the art.

A "target structural motif," or "target motif," refers to any rationally selected sequence or combination of sequences in which the sequence(s) are chosen based on a three-dimensional configuration that is formed upon the folding of the target motif, or on consensus sequences of regulatory or active sites. There are a variety of target motifs known in the art. Protein target motifs include, but arc not limited to, enzyme active sites and signal sequences. Nucleic acid target motifs include, but are

not limited to, hairpin structures, promoter sequences and other expression elements such as binding sites for transcription factors.

A variety of structural formats for the input and output means can be used to input and output the information in the computer-based systems of the present invention. One format for an output means ranks the relative expression levels of different polynucleotides. Such presentation provides a skilled artisan with a ranking of relative expression levels to determine a gene expression profile..

As discussed above, the "library" of the invention also encompasses biochemical libraries of the polynucleotides of SEQ ID NOs:1-339, *e.g.*, collections of nucleic acids representing the provided polynucleotides. The biochemical libraries can take a variety of forms, *e.g.*, a solution of cDNAs, a pattern of probe nucleic acids stably associated with a surface of a solid support (*i.e.*, an array) and the like. Of particular interest are nucleic acid arrays in which one or more of SEQ ID NOs:1-339 is represented on the array. By array is meant a an article of manufacture that has at least a substrate with at least two distinct nucleic acid targets on one of its surfaces, where the number of distinct nucleic acids can be considerably higher, typically being at least 10 nt, usually at least 20 nt and often at least 25 nt. A variety of different array formats have been developed and are known to those of skill in the art. The arrays of the subject invention find use in a variety of applications, including gene expression analysis, drug screening, mutation analysis and the like, as disclosed in the above-listed exemplary patent documents.

In addition to the above nucleic acid libraries, analogous libraries of polypeptides are also provided, where the where the polypeptides of the library will represent at least a portion of the polypeptides encoded by SEQ ID NOs:1-339.

The present invention will now be illustrated by reference to the following examples which set forth particularly advantageous embodiments. However, it should be noted that these embodiments are illustrative and are not to be construed as restricting the invention in any way.

EXAMPLES

EXAMPLE 1

ISOLATION OF THE POLYNUCLEOTIDES

cDNA libraries were prepared from PrEC, normal human prostate epithelial cells, and LNCaP, a cell line derived from human lymph node metastasized prostate cancer. PrEC cells are available from Clonetics, San Diego, California, U.S.A. LNCaP cells are available from the ATCC, Manassas, Virginia, U.S.A.

Using a PCR technique and reagents available from Clontech, Palo Alto, California, USA (CLONTECH PCR-Select™), mRNA up-regulated in LNCaP was captured and amplified. The captured polynucleotide inserts were inserted in the pCR2.1 vector, available from Invitrogen, Carlsbad, California, U.S.A. The vectors with the inserts were transformed into *E. coli* cells.

EXAMPLE 2

CONFIRMATION OF DIFFERENTIAL DISPLAY

Ten clones were chosen at random, and up-regulation of the sequences of these clone inserts in LNCaP versus PrEC cells was confirmed by Northern blot. Dot blots were performed on 168 clones and up-regulation was confirmed.

Further, sequencing of the clones showed that prostate specific antigen (PSA) and prostate specific membrane antigen (PSMA) sequences were isolated by the process described in Example 1. A good correlation between increased serum PSA levels and prostate tumors has been observed. PSMA, a cell surface antigen, is another observed marker for prostate cancer. See Bosland, Encyclopedia of Cancer, Volume II, pages 1283-1296 (1997), Academic Press. Thus, the data confirm that up-regulated mRNA characteristic of gene expression in prostate cancer was cloned by the method of Example 1.

EXAMPLE 3

POLYNUCLEOTIDE SEQUENCES

The sequence results are shown in SEQ ID NO:1-339. For the sequencing experiments, each clone was named SL-1 to SL-209. Inserts from some of the clones were sequenced more than once. Each sequence was designated a unique combination of two names. This unique combination is shown in Table 1 in columns 2 and 3, denoted as "Sequence Name" and "Other Seq Name."

Table 1 indicates all the sequences that correspond to each clone. Thus, all the sequences corresponding to clone SL-3, for example, are grouped together in Table 1.

Clones also were assigned cluster numbers. See column 4 of Table 1. Clones with the same cluster number generally comprise sequence derived from the same mRNA transcripts.

The last column of Table 1 indicates the nearest neighbor as determined by an alignment to sequences in a publicly available database.

A consensus for the sequence of each clone can be constructed by aligning the corresponding sequences or reverse complements thereof. Table 1 lists the names of all the sequences that correspond to each clone, and Table 2 shows the specific sequence that corresponds to each unique combination of Sequence Name and/or "Other Seq. Name."

The entire insert of some clones may not be represented by the sequences presented in Table 2. For example, the 5' and 3' ends of a clone insert may have been sequenced, but the sequences do not overlap. Additional sequence corresponding to the clone insert can be isolated and determined by constructing probes or primers from the sequences presented in Table 2 and a library of mRNA or cDNA from a prostate cell or prostate cancer cell line using the methods described above.

EXAMPLE 4

RESULTS OF PUBLIC DATABASE SEARCH

Both the nucleotide sequence and translations of masked sequences shown in the Sequence Listing were aligned with individual sequences that were publicly available. Similarity with individual sequences is used to determine the activity of the polypeptides encoded by genes corresponding to the sequences referred to in Table 2.

The sequences in SEQ ID NO:1-333 first were masked to remove the pCR2.1 vector sequences. Masking was performed by aligning the pCR2.1 sequences with each of SEQ ID NO:1-333 using the BLASTN program. Any sequence that produced an alignment with a score of less that 0.1 was masked.

A BLASTN vs. Genbank search was performed using the masked sequences with search parameters of greater than 99% overlap, 99% identity, and a p value of less than 1×10^{-40} and this resulted in discard of sequences. Sequences from this search also were discarded if the inclusive parameters were met, but the sequence was ribosomal or vector-derived.

The resulting sequences from the previous search were classified into three groups (1, 2 and 3 below) and searched in a BLASTX vs. NRP (non-redundant proteins) database search: (1) unknown (no hits in the Genbank search), (2) weak similarity (greater than 45% identity and p value of less than 1×10^{-5}), and (3) high similarity (greater than 60% overlap, greater than 80% identity, and p value less than 1×10^{-5}). This search resulted in discard of sequences as having greater than 99% overlap, greater than 99% identity, and p value of less than 1×10^{-40}.

The remaining sequences were classified as unknown (no hits), weak similarity, and high similarity (parameters as above). Two searches were performed on this set of sequences. First, a BLAST vs. EST database search resulted in discard of sequences with greater than 99% overlap, greater than 99% similarity and a p value of less than 1×10^{-40}; sequences with a p value of less than 1×10^{-65} when compared to a database sequence of human origin were also excluded. Second, a BLASTN vs. Patent

GeneSeq database resulted in discard of sequences with greater than 99% identity; p value less than 1 x 10^{-40}; greater than 99% overlap.

The masked sequences were translated in all six reading frames to determine the best alignment with the individual sequences. These amino acid sequences and nucleotide sequences are referred, generally, as query sequences, which are aligned with the individual sequences.

Query and individual sequences were aligned using the BLAST programs, available over the world wide web.

Table 2 shows the results of the alignments. Table 2 refers to each sequence by its Sequence Name and/or "Other Seq. Name" and includes the accession numbers and descriptions of nearest neighbors from the Genbank and Non-Redundant Protein searches.

The activity of the polypeptide encoded by the sequences referred to in Table 2 is expected to be the same or similar to the nearest neighbor reported in Table 2. The accession number of the nearest neighbor is reported, providing a reference to the activities exhibited by the nearest neighbor. The search program and database used for the alignment also are indicated as well as a calculation of the p value.

Full length sequences or fragments of the polynucleotide sequences of the nearest neighbors can be used as probes and primers to identify and isolate the full length sequence corresponding to sequence referred to in Table 2. Although full length sequences can be obtained from the cell lines described above, the nearest neighbors can indicate a tissue or cell type to be used to construct a library for the full-length sequences of those referred to in Table 2.

The sequences referred to in Table 2 and the translations thereof may be human homologs of known genes of other species or novel allelic variants of known human genes. In such cases, these new human sequences may be suitable as diagnostics, prognostics, or therapeutics. As diagnostics, the human sequences exhibit greater specificity in detecting and differentiating human cell lines and types than homologs of other species. The human polypeptides are less likely to be immunogenic when administered to humans than homologs from other species. Further, on

administration to humans, the encoded polypeptides can show greater specificity or can be better regulated by other human proteins than are homologs from other species.

In the preferred embodiments of the invention, the sequences shown in SEQ ID NO:1-339 consisting of the unmasked regions should be considered as the source of probes and primers, as these sequences are most representative of the distinguishing portions of these polynucleotides.

Generally, the masking itself does not influence the search results as shown in Table 2, except to eliminate multiple "hits" based on similarity to repetitive regions common to more than one polypeptide.

EXAMPLE 5

ANALYSIS OF CLONES SL-5, SL-9, SL-68, AND SL-173

Clone SL-5 (SEQ ID NO:14 and 334)

By Northern Blot, a 4.1 kb band was observed in expressed in normal prostate, testis,and lymphoblasic leukemia. It was also expressed in the cell lines LNCaP, and MDA PCa 2A and 2B (metastatic prostate cells into bone, androgen sensitive). Additional sequence corresponding to SEQ ID NO:14 is disclosed in SEQ ID NO:334.

Expression of SL-5 was investigated in normal and tumor tissues using immunohistochemistry. Antibody was prepared using two sequences from clone SL-5: H_2N-CGPRLPSFPCPTHEPSTGQLSK-$CONH_2$ and H_2N-CKDSQGLSDFKRNSRTTR-RSYKCCONH$_2$. Using polyclonal antibodies raised against a mixture of these polypeptides, immunohistochemistry (IHC) was performed on a variety of tumor tissues and corresponding normal tissue. The methods used were those described for the Manual IHC Protocol using BioGenex Reagents and Zymed AEC Solution, as known in the art. As shown in Figure 3, SL-5 was detected in the following tumor tissue: adrenal, ovary, breast, colon, prostate, uterus, cervix, kidney, pancreas, liver, stomach, lymphoma, seminoma, thyroid, melanoma, basal cell carcinoma, and other tumor tissues. Where comparative normal tissue was available, expression in the

corresponding normal tissue was lower than in the tumor tissue. Thus, SL-5 is a useful marker for cancer tissue including prostate.

Clone SL-9 (SEQ ID NO:18)

By Northern Blot, sequences from SL-9 were specifically expressed in normal spleen and normal peripheral blood leukocyte. Expression of the SL-9 sequences was observed also in promyelocytic leukemia HL-60, chronic mylogenous leukemia K-562, lymphoblastic leukemia MOLT-4, Burkitt's lymphoma, and Raji cancer cell lines by Northern Blot.

Clone SL-173 (SEQ ID NO:153 and 154)

By Northern Blot, SL173 was found in every cancer cell line tested. Sequence from SL-173 has similarity to and may be a human homologue of the rat tumor transforming gene, which was found in the pituitary and described in Pei *et al.*, Mol. Endo. 11: 433-441 (1997) and Pei, J. Biol. Chem. 273(9): 5219-5225 (1998). When the rat tumor transforming gene was injected in NIH3T3cells, the cells became transformed and were able to form a tumor when injected into mice. (Pei *et al.*, Mol. Endo. supra).

Clone SL-68 (SEQ ID NO:218 and 219)

Two transcripts, 2.6kb and 4.3kb, were observed in normal spleen, thymus and peripheral blood leukocytes, as well as in promyelocytic leukemia, chronic myelogenous leukemia and lymphoblastic leukemia. The 4.3kb transcript was seen in normal testis, colon, Hela cell S3, colorectal adenocarcinoma and melanoma. The 2.6kb band was found in the following prostate cell lines: PC-3 (metastatic to bone, androgen insensitive); DU-145 (metastatic to brain, androgen insensitive); FFpz (primary cells derived from normal prostate epithelium); Ffca (primary cells derived from Gleason Grade 3 prostate cancer epithelium); and WO-CA (primary cells derived from Gleason Grade 4 prostate cancer epithelium). However, higher expression was observed in LNCaP, MDA PCa 2A, HPV-7 and HPV-10. A 9.5kb transcript was also observed in MDA PCa 2A and 2B. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:335.

Clone SL69 (SEQ ID NO:220 and 221)

A weak 2.6kb band was observed in normal testis as well as in chronic myelogenous leukemia and lymphoblastic leukemia. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:336.

Clone SL86 (SEQ ID NO:242 and 243)

The sequence was expressed in normal prostate (2.7kb and 1.1kb) and testis (1.1kb). Low expression was observed in a cancer cell line blot using the cell lines described above. 1.1kb and 2.7kb transcripts were observed in the cell lines LNCaP, and MDA PCa 2a and 2b (metastatic prostate cells into bone, androgen sensitive), and weak 1.1kb transcript was seen in HPV-7 (immortalized normal prostate cells) and HPV-10 (immortalized prostate cancer cells). Additional sequence corresponding to this clone is disclosed in SEQ ID NO:337.

Clone SL195 (SEQ ID NO:288 and 289)

The sequence was expressed in normal prostate as a 1.9kb transcript, and the same transcript also observed in all cell lines in the cancer cell line blot described above. It was more heavily expressed in HeLa cell S3 and chronic myelogenous leukemia, and was expressed in all prostate cell lines. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:338.

Clone SL197 (SEQ ID NO:292 and 293)

Two transcripts, 2.4kb and 4kb, were observed in normal prostate and testis. Two very weak 2.4kb signals were observed in Hela cell S3 and chronic myelogenous leukemia. The 2.4kb transcript was expressed in all prostate cell lines. A 4kb transcript was found in LNCaP, MDA PCa 2A and 2B. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:339.

Those skilled in the art will recognize, or be able to ascertain, using not more than routine experimentation, many equivalents to the specific embodiments of

the invention described herein. Such specific embodiments and equivalents are intended to be encompassed by the following claims.

All patents, published patent applications and publications cited herein are incorporated by reference as if set forth fully herein.

TABLE 1

Clone #	Sequence Name	Other Seq Name	Clone # Cluster #	Nearest Neighbor If Available
SL-001	SL001	19sl1	SL-001	S60754 (VNTR locus DXZ4)
	SL001M13			
SL-002	SL002	20sl2	SL-002	L07935 HUMVNTRA
SL-003	SL003	21sl3	SL-003	AB006625 - KIAA0287 gene
	SL003	35-sl3-1m13		
	SL003	35-sl3-1t7		
	SL003	37-sl3-1m13		
	SL003	39-sl3-1m13		
SL-004	SL004	22sl4	SL-004	
	SL004M13			
SL-005	SL005	23sl5	SL-005	
	SL005	30sl11b		
SL-006	SL006	24sl6	SL-006	
	SL006M13			cosmid genomic clone
SL-007	SL007	25sl7	SL-003	AB006625- KIAA0287
	SL007	28-sl7-1m13		
	SL007	28-sl7-1t7		
	SL007	30-sl7-1m13		
	SL007	30-sl7-1t7		
	SL007	32-sl7-1m13		
	SL007	32-sl7-1t7		
SL-008	SL008	26sl8	SL-008	HUMP65 E=9e-62 L-plastin. Phosphoprotein (p65)
SL-009	SL009	27sl9		
	SL009M13			
SL-010	SL010	28sl10	SL-005	
SL-011	SL011	29sl11a	SL-011	HSU10685 - MAGE-10 Gene
SL-012	SL012	31sl12	SL-011	HSU10685 - MAGE-10 Gene
SL-013	SL013	32sl13		
SL-015	SL015	34sl15	SL-015	HSU90336 - PEG3 mRNA
	SL015	46-sl15-2m13		
	SL015	47-sl15-2m13		HSMRNAEN - Enkephalinase
	SL015	47-sl15-2t7		
SL-016	SL016	10-sl16-1m13	SL-016	
	SL016	10-sl16-1t7		
	SL016	11-sl16-1m13		
	SL016	18-sl16-2m13		
	SL016	18-sl16-2t7		
	SL016	19-sl16-2m13		

TABLE 1

	SL016	19-sl16-2t7		
	SL016	20-sl16-2m13		
	SL016	20-sl16-2t7		
	SL016	35sl16		
	SL016	9-sl16-1t7		
SL-017	SL017	36sl17	SL-017	HUMORF01 - KIAA0101 gene
SL-028	SL028m13	B1	SL-028	
	SL028t7	B1		
SL-029	SL029m13	WE97.C1.M13	SL-029	
	SL029t7	WE97.C1.T7		
SL-032	SL032m13	WE97.D1.M13	SL-032	HSTPI1G TPI1 gene
	SL032t7	WE97.D1.T7		for triosephosphate isomerase.
SL-036	SL036m13	WE97.E1.M13	SL-036	HSU81599 homeodomain protein
	SL036t7	WE97.E1.T7		HOXB13
SL-037	SL037m13	C1	SL-005	
	SL037m13	WE97.F1.M13		
	SL037t7	C1		
SL-040	SL040m13	D1	SL-040	
	SL040t7	D1		
SL-041	SL041m13	E1	SL-016	
	SL041m13	WE97.H1.M13		
	SL041t7	E1		
	SL041t7	WE97.H1.T7		
SL-042	SL042m13	WE97.A2.M13	SL-008	HUMP65 phosphoprotein (p65)
	SL042t7	WE97.A2.T7		HUMPLASTA L-plastin gene
SL-044	SL044m13	WE97.B2.M13	SL-016	
	SL044t7	WE97.B2.T7		
SL-045	SL045m13	WE97.C2.M13	SL-045	
	SL045t7	WE97.C2.T7		genomic DNA
SL-046	SL046m13	WE97.D2.M13	SL-046	
	SL046t7	WE97.D2.T7		
SL-047	SL047m13	WE97.E2.M13	SL-047	
	SL047t7	WE97.E2.T7		
SL-050	SL050m13	WE97.F2.M13	SL-050	
	SL050t7	WE97.F2.T7		
SL-051	SL051m13	WE97.G2.M13	SL-051	
	SL051t7	WE97.G2.T7		
SL-054	SL054m13	WE97.H2.M13	SL-054	
	SL054t7	WE97.H2.T7		
SL-055	SL055m13	F1	SL-050	
	SL055t7	F1		
	SL055t7	WE97.A3.T7		

TABLE 1

SL-057	SL057m13 SL057t7	WE97.C3.M13 WE97.C3.T7	**SL-057**	
SL-058	SL058m13 SL058t7	WE97.D3.M13 WE97.D3.T7	**SL-058**	HSLRPR1GN leucine-rich primary response protein 1.
SL-061	SL061m13 SL061t7	WE97.E3.M13 WE97.E3.T7	**SL-028**	
SL-062	SL062m13 SL062t7	WE97.F3.M13 WE97.F3.T7	**SL-028**	
SL-064	SL064m13 SL064t7	WE97.G3.M13 WE97.G3.T7	**SL-064**	
SL-066	SL066m13 SL066t7	WE97.H3.M13 WE97.H3.T7	**SL-016**	
SL-067	SL067m13 SL067t7 SL067t7	H1 H1 WE97.A4.T7	**SL-067**	HUMKIAAP - KIAA0095 gene
SL-068	SL068m13 SL068t7	WE97.B4.M13 WE97.B4.T7	**SL-068**	
SL-069	SL069m13 SL069t7	WE97.C4.M13 WE97.C4.T7	**SL-069**	
SL-071	SL071m13 SL071t7	WE97.D4.M13 WE97.D4.T7	**SL-071**	
SL-072	SL072m13 SL072t7	WE97.E4.M13 WE97.E4.T7	**SL-015**	HSU90336 Human PEG3 mRNA AB006625 KIAA0287
SL-074	SL074m13 SL074t7	WE97.F4.M13 WE97.F4.T7	**SL-074**	
SL-075	SL075m13 SL075t7	WE97.G4.M13 WE97.G4.T7	**SL-075**	
SL-076	SL076m13 SL076t7	WE97.H4.M13 WE97.H4.T7	**SL-076**	
SL-077	SL077m13 SL077t7	WE97.A5.M13 WE97.A5.T7	**SL-077**	
SL-078	SL078m13 SL078m13 SL078t7	A2 WE97.B5.M13 A2	**SL-016**	BAC clone (with Alu)
SL-081	SL081m13 SL081t7	WE97.E5.M13 WE97.E5.T7	**SL-003**	AB006625 - KIAA0287 gene
SL-083	SL083m13 SL083t7	WE97.G5.M13 WE97.G5.T7	**SL-083**	
SL-084	SL084m13 SL084t7	WE97.H5.M13 WE97.H5.T7	**SL-084**	(HS295C6 Human DNA sequence)

TABLE 1

SL-085 SL-086	SL085m13 WE97.A6.M13 SL086m13 WE97.B6.M13 SL086t7 WE97.B6.T7	SL-085 SL-086	
SL-087	SL087m13 WE97.C6.M13 SL087t7 WE97.C6.T7	SL-087	EST and Mus musculus ras-GTPase-activating protein
SL-088	SL088m13 WE97.D6.M13 SL088t7 WE97.D6.T7	SL-015	HSU90336 Human PEG3 & AB006625 - KIAA0287 gene
SL-089	SL089m13 WE97.E6.M13 SL089t7 WE97.E6.T7	SL-089	
SL-090 SL-091	SL090m13 D2 SL090t7 D2 SL091m13 WE97.G6.M13 SL091t7 WE97.G6.T7	SL-090 SL-091	
SL-092	SL092m13 WE97.H6.M13 SL092t7 WE97.H6.T7	SL-092	HUMPRKACB testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform)
SL-093 SL-094	SL093m13 E2 SL093t7 E2 SL094m13 WE97.B7.M13 SL094t7 WE97.B7.T7	SL-008 SL-094	HUMLPLSTN2 L-plastin gene
SL-095	SL095m13 WE97.C7.M13 SL095t7 WE97.C7.T7	SL-003	AB006625 - KIAA0287
SL-096	SL096m13 WE97.D7.M13 SL096t7 WE97.D7.T7	SL-096	
SL-097	SL097m13 SL097t7	SL-071	
SL-098	SL098m13 SL098t7	SL-098	
SL-099	SL099m13 SL099t7	SL-016	
SL-100	SL100m13 F2 SL100m13 SL100t7 F2 SL100t7	SL-085	SL100m13 Alu - 2e-71
SL-102	SL102m13 SL102t7	SL-102	HSRPL32 ribosomal protein L32
SL-103	SL103m13 SL103t7	SL-103	
SL-105	SL105m13 SL105t7	SL-105	
SL-106	SL106m13 SL106t7	SL-106	
SL-107	SL107m13 SL107t7	SL-016?	SL107m13 -Alu - 2e-78
SL-110	SL110m13	SL-003	AB006625- KIAA0287 gene

TABLE 1

	SL110t7		
SL-111	SL111m13 SL111t7	**SL-111**	
SL-112	SL112m13 SL112t7	**SL-112**	
SL-115	SL115m13 SL115t7	**SL-115**	D86322 - calmegin
SL-116	SL116m13 SL116t7	**SL-116**	
SL-117	SL117m13 SL117t7	**SL-117**	HUMNUMB23 = HUMNPM Human nucleolar protein (B23) or Human nucleophosmin
SL-118	SL118m13 SL118t7	**SL-118**	
SL-119	SL119m13 SL119t7	**SL-119**	
SL-120	SL120m13 SL120t7	**SL-046**	
SL-121	SL121m13 SL121t7	**SL-016**	
SL-122	SL122m13 SL122t7	**SL-122**	HUMPRKACB testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform)
SL-124	SL124m13 SL124t7	**SL-016**	
SL-125	SL125m13 SL125t7	**SL-125**	HSU19145 GAGE-4 (US 5,648,226)
SL-127	SL127m13 SL127t7	**SL-127**	
SL-128	SL128m13 SL128t7	**SL-005**	
SL-130	SL130m13 SL130t7	**SL-130**	
SL-132	SL132m13 SL132t7	**SL-011**	HSU10685 MAGE-10 gene (US 5,612,201)
SL-134	SL134m13 SL134t7	**SL-134**	HSC70P Hsc 70 pseudogene (Heat Shock protein)
SL-135	SL135m13 SL135t7	**SL-135**	
SL-138	SL138m13 SL138t7	**SL-051**	
SL-139	SL139m13 SL139t7	**SL-139**	Homo sapiens cosmid
SL-142	SL142m13 SL142t7	**SL-005**	

TABLE 1

SL-143	SL143m13 SL143t7		SL-143	Genomic clone AC003978
SL-144	SL144m13 SL144t7		SL-144	E= 3-81
SL-145 SL-146	SL145m13 SL146m13 SL146t7	 WE97.E7.M13 WE97.E7.T7	SL-003 SL-146	AB006625- KIAA0287 gene
SL-147 SL-148	SL147m13 SL147m13 SL147t7 SL148m13 SL148t7	G2 WE97.F7.M13 G2 WE97.G7.M13 WE97.G7.T7	SL-147 SL-016	(1) HSCDC2R Human cell cycle control gene CDC2 (2) HSU29091 selenium-binding
SL-149 SL-150 SL-151	SL149m13 SL149t7 SL150m13 SL150t7 SL151m13 SL151t7	H2 H2 A3 A3 WE97.B8.M13 WE97.B8.T7	SL-149 SL-150 SL-151	"Human DNA sequence" Genomic frag
SL-152	SL152m13 SL152t7	WE97.C8.M13 WE97.C8.T7	SL-152	
SL-153	SL153m13 SL153t7	WE97.D8.M13 WE97.D8.T7	SL-153	
SL-154	SL154t7	WE97.E8.T7	SL-154	HUMPAR5R - PAR-5 mRNA
SL-155	SL155m13 SL155t7	WE97.F8.M13 WE97.F8.T7	SL-028	SL155m13 - EST only in Mouse
SL-156	SL156m13 SL156t7	WE97.G8.M13 WE97.G8.T7	SL-016	
SL-157	SL157m13 SL157t7	WE97.H8.M13 WE97.H8.T7	SL-157	
SL-158	SL158m13 SL158t7	WE97.A9.M13 WE97.A9.T7	SL-011	HSU10685 MAGE-10 gene (US 5,612,201)
SL-159	SL159m13 SL159t7	WE97.B9.M13 WE97.B9.T7	SL-159	Chromosome 11 pac
SL-160	SL160m13 SL160t7	WE97.C9.M13 WE97.C9.T7	SL-051	
SL-161	SL161m13 SL161t7	WE97.D9.M13 WE97.D9.T7	SL-161	HUMP65 phosphoprotein (p65) HUMPLASTA L-plastin gene
SL-162 SL-163	SL162m13 SL162t7 SL163m13 SL163t7	B3 B3 WE97.F9.M13 WE97.F9.T7	SL-162 SL-016	HSU75330 -NCAM21
SL-164	SL164m13 SL164t7	WE97.G9.M13 WE97.G9.T7	SL-016	
SL-165	SL165m13 SL165t7	WE97.H9.M13 WE97.H9.T7	SL-165	(genomic seq)

TABLE 1

SL-166	SL166m13	C3	SL-166	
	SL166t7	C3		
	SL166t7	WE97.A10.T7		
SL-167	SL167m13	WE97.B10.M13	SL-167	HUMLPACI09 lipoprotein-associated coagulation inhibitor (LACI) gene
	SL167t7	WE97.B10.T7		
SL-168	SL168m13	WE97.C10.M13	SL-168	
	SL168t7	WE97.C10.T7		
SL-169	SL169m13	WE97.D10.M13	SL-169	HUMNEUROF oligodendrocyte myelin glycoprotein (OMG)
	SL169t7	WE97.D10.T7		
SL-170	SL170m13	WE97.E10.M13	SL-170	
	SL170t7	WE97.E10.T7		
SL-171	SL171m13	WE97.F10.M13	SL-171	AB002374 - KIAA0376 gene
	SL171t7	WE97.F10.T7		
SL-172	SL172m13	WE97.G10.M13	SL-016	
	SL172t7	WE97.G10.T7		
SL-173	SL173m13	WE97.H10.M13	SL-173	
	SL173t7	WE97.H10.T7		
SL-174	SL174m13	D3	SL-174	
	SL174t7	D3		
SL-175	SL175m13	WE97.B11.M13	SL-016	
	SL175t7	WE97.B11.T7		
SL-176	SL176m13	WE97.C11.M13	SL-176	
	SL176t7	WE97.C11.T7		
SL-177	SL177m13	WE97.D11.M13	SL-177	
	SL177t7	WE97.D11.T7		
SL-178	SL178m13	WE97.E11.M13	SL-178	
	SL178t7	WE97.E11.T7		Human BAC clone
SL-179	SL179m13	WE97.F11.M13	SL-179	
	SL179t7	WE97.F11.T7		
SL-181	SL181m13	WE97.H11.M13	SL-181	
	SL181t7	WE97.H11.T7		
SL-182	SL182m13	F3	SL-182	HUMAPEA apurinic/apyrimidinic endonuclease (HAP1h)
	SL182m13	WE97.A12.M13		HSHAP1MR Human HAP1 mRNA
	SL182t7	F3		
SL-183	SL183m13	WE97.B12.M13	SL-046	
	SL183t7	WE97.B12.T7		
SL-184	SL184m13	WE97.C12.M13	SL-016	
	SL184t7	WE97.C12.T7		
SL-186	SL186m13	WE97.D12.M13	SL-186	
	SL186t7	WE97.D12.T7		
SL-187	SL187m13	WE97.E12.M13	SL-187	
	SL187t7	WE97.E12.T7		
SL-188	SL188m13	G3	SL-188	
	SL188t7	G3		
	SL188t7	WE97.F12.T7		

TABLE 1

SL-191	SL191m13 SL191t7	WE97.H12.M13 WE97.H12.T7	SL-181	
SL-192	SL192m13 SL192t7	H3 H3	SL-192	Human DNA sequence"
SL-193	SL193m13 SL193t7	A4 A4	SL-193	
SL-194	SL194m13 SL194t7	B4 B4	SL-194	HUMKG1DD - KIAA0098 gene
SL-195	SL195m13 SL195t7	C4 C4	SL-195	
SL-196	SL196m13 SL196t7	D4 D4	SL-196	HUMMAOAAA monoamine oxidase (MAOA)
SL-197	SL197m13 SL197t7	E4 E4	SL-197	
SL-198	SL198m13 SL198t7	F4 F4	SL-198	
SL-199	SL199m13 SL199t7	G4 G4	SL-016	
SL-201	SL201m13 SL201t7	A5 A5	SL-028	(Mouse ESTs only)
SL-202	SL202m13 SL202t7	B5 B5	SL-202	mitochondrial genome & ESTs(?)
SL-203	SL203m13 SL203t7	C5 C5	SL-040	
SL-204	SL204m13 SL204t7	D5 D5	SL-204	
SL-205	SL205m13 SL205t7	E5 E5	SL-205	
SL-206	SL206m13 SL206t7	F5 F5	SL-015	AB006625 - KIAA0287 gene
SL-207	SL207m13 SL207t7	G5 G5	SL-207	HUMFOLMES - DHFR dihydrofolate reductase gene
SL-208	SL208m13 SL208t7	H5 H5	SL-208	AB011165 - KIAA0593
SL-209	SL209m13 SL209t7	A6 A6	SL-209	

batch 1
batch 2
batch 3
batch 4

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
10-sl16-1t7	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>
18-sl16-2t7	<NONE>	<NONE>	<NONE>	MT_PLEPL	METALLOTHIONEIN (MT)>PIR2:S30567 metallothionein - plaice>GP:PPMMET_1 P;platessa mRNA for metallothionein	0.32
22sl4	AC004601	*** SEQUENCING IN PROGRESS *** Human Chromosome 11p14.3 PAC clone pDJ939m16; HTGS phase 1, 3 unordered pieces.	0.016	VP1_BPCHP	PROTEIN VP1 (ORF1)	1.0
27sl9	AF001549	Homo sapiens chromosome 16 BAC clone CIT987SK-270G1 complete sequence.	7.2e-28	ALU6_HUMAN	!!!! ALU SUBFAMILY SP WARNING ENTRY !!!!	3.5e-07
32sl13	AF006259	Homo sapiens Rad51-interacting protein mRNA, complete cds.	1.2e-09	MMU93583_1	Mus musculus RAD51-binding protein RAB22 mRNA, complete cds	1.2e-13
39-sl3-1m13	U07083	Human prostatic acid phosphatase (ACPP) gene, exon 1.	1.1e-09	MMU41047_1	Mus musculus transcription factor Genesis mRNA, complete cds; A winged helix retinoic-acid hepatocyte nuclear factor 3/forkhead transcription factor; HNF3/FH transcription factor	0.36
47-sl15-2t7	I08056	Sequence 2 from Patent EP 0272928.	4.8e-52	<NONE>	<NONE>	<NONE>
sl102m13	AC004453	Homo sapiens PAC clone DJ0844F09 from 7p12-p13, complete sequence.	5.0e-50	SIK1_YEAST	SIK1 PROTEIN>PIR2:S48550 hypothetical protein YLR197w - yeast (Saccharomyces cerevisiae)>GP:SCU20237_1 Saccharomyces cerevisiae Sik1p (SIK1) gene, complete cds; Possible microtubule binding protein; similar to GenBank Accession Number U14913	2.7e-09
sl103m13	AC002542	Human BAC clone RG114A06 from 7q31, complete sequence.	0.78	MUSIGHV01B_1	Mouse CBA/J Ig heavy chain V1 region pseudogene, 5' end; Ig heavy chain precursor; Possible pseudogene	0.30
sl103t7	AC002542	Human BAC clone RG114A06 from 7q31, complete sequence.	7.0e-11	MUSIGHV01B_1	Mouse CBA/J Ig heavy chain V1 region pseudogene, 5' end; Ig heavy chain precursor; Possible pseudogene	0.25

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
sl106t7	I48979	Sequence 6 from patent US 5627054.	4.3e-39	Y694_METJA	HYPOTHETICAL PROTEIN MJ0694>PIR2:F64386 hypothetical protein MJ0694 - Methanococcus jannaschii>GP:U67516_8 Methanococcus jannaschii section 58 of 150 of the complete genome; Conserved hypothetical protein; Similar to SP:Q12499 PID:1420682 PI	1.5e-08
sl107t7.fsa	AL021395	Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 269M15; HTGS phase 1.	2.6e-07	ALU4_HUMAN	!!!! ALU SUBFAMILY SB2 WARNING ENTRY !!!!	0.45
sl124t7	B31344	HS-1008-A2-A05-MF.abi CIT Human Genomic Sperm Library C Homo sapiens genomic clone Plate=CT 330 Col=10 Row=A, genomic survey sequence.	1.0e-55	ALU7_HUMAN	!!!! ALU SUBFAMILY SQ WARNING ENTRY !!!!	1.2e-14
sl127t7	Z83818	Human DNA sequence from PAC 138A5 on chromosome X contains ESTs.	2.8e-16	YA3A_SCHPO	HYPOTHETICAL TRP-ASP REPEATS CONTAINING PROTEIN C18B11.10 IN CHROMOSOME I>PIR2:S58306 hypothetical protein SPAC18B11.10 - fission yeast (Schizosaccharomyces pombe)>GP:SPAC18B11_10 S;pombe chromosome I cosmid c18B11; Unknown; SPAC18B11;10, le	0.97
sl135m13	AC003959	Homo sapiens chromosome 5, P1 clone 1029A7 (LBNL H15), complete sequence.	1.8e-57	AC004416_5	Homo sapiens BAC clone RG013N12 from 7q31;2, complete sequence; H_RG013N12;gw;1335199;a	0.016
sl135t7	AC003044	Human PAC clone DJ1055C04 from 7p15-7p21, complete sequence.	3.8e-25	ATTS0669_1	A; thaliana transcribed sequence; clone VDV28-22792, 3' end; similar to nonspecific lipid-transfer protein precursor	0.77
sl144m13	AC003684	Homo sapiens; HTGS phase 1, 53 unordered pieces.	2.2e-10	<NONE>	<NONE>	<NONE>
sl144t7	AC004089	*** SEQUENCING IN PROGRESS *** Human Chromosome 7 BAC Clone 155b01; HTGS phase 1, 11 unordered pieces.	0.25	<NONE>	<NONE>	<NONE>

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL149m13 WE97.H7.M13	M87923	Human carcinoma cell-derived Alu RNA transcript, clone CE12.	7.2e-55	ALU2_HUMAN	!!!! ALU SUBFAMILY SB WARNING ENTRY !!!!	4.7e-17
SL150m13 WE 97.A8.M13	AF019122	Homo sapiens DNA polymerase gamma (POLG) gene, nuclear gene encoding mitochondrial protein, partial sequence, genomic survey sequence.	5.5e-07	<NONE>	<NONE>	<NONE>
SL152m13	AF022186	Cyanidium caldarium RK1 chloroplast sequence.	0.11	<NONE>	<NONE>	<NONE>
SL152l7	AC002524	Homo sapiens Xp22 BAC GSHB-257G1 (Genome Systems BAC Library) complete sequence.	3.5e-28	F40201	artifact-warning sequence (translated ALU class F) - human	1.2e-05
SL153m13	U29895	Human 4-hydroxyphenylpyruvate-dioxygenase gene, complete cds.	4.4e-15	C40201	artifact-warning sequence (translated ALU class C) - human	0.49
SL153l7	U29895	Human 4-hydroxyphenylpyruvate-dioxygenase gene, complete cds.	5.1e-09	A46010	X-linked retinopathy protein (C-terminal, clone XEH.8c) - human (fragment)>GP:S58722_1 X-linked retinopathy protein (3' region, clone XEH;8c) [human, mRNA Partial, 390 nt]; This sequence comes from Fig; 5	0.070
SL155m13	Z99286	Caenorhabditis elegans cosmid Y7A9C, complete sequence.	0.016	POLG_PRSVH	GENOME POLYPROTEIN (CONTAINS: N-TERMINAL PROTEIN; HELPER COMPONENT PROTEINASE (EC 3.4.22.-) (HC-PRO); 42-50 KD PROTEIN; CYTOPLASMIC INCLUSION PROTEIN (CI); 6 KD PROTEIN; NUCLEAR INCLUSION PROTEIN A (NI- A) (EC 3.4.22.-) (49K PROTEINASE) (49	1.0
SL157m13	U91321	Human Chromosome 16 BAC clone CIT987SK-A-363E6, complete sequence.	6.0e-26	ALU1_HUMAN	!!!! ALU SUBFAMILY J WARNING ENTRY !!!!	4.5e-11

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL160t7	<NONE>	<NONE>	<NONE>	CA34_HUMAN	PROCOLLAGEN ALPHA 3(IV) CHAIN PRECURSOR>PIR1:CGHU3B collagen alpha 3(IV) chain precursor, long splice form - human>GPN:HSCOL4A3_1 H;sapiens COL4A3 mRNA; Type IV collagen alpha 3 chain>GP:HSCOL4A3_1 H;sapiens COL4A3 mRNA; Type IV collagen alp	0.99
SL162t7 WE97.E9.T7	X58263	Mouse microsatellite marker DNA D4SMH6b, 4.	0.0029	PRF1_LYCES	36.4 KD PROLINE-RICH PROTEIN>PIR2:S19129 proline-rich protein TPRP-F1 - tomato>GP:LETPRPF1_1 L; esculentum TPRP-F1 gene for a proline rich protein	0.99
SL169t7	AC004687	*** SEQUENCING IN PROGRESS *** Homo sapiens chromosome 17, clone hRPC.1171_I_10; HTGS phase 1, 4 unordered pieces.	2.5e-11	<NONE>	<NONE>	<NONE>
SL174t7	<NONE>	<NONE>	<NONE>	A54895	mucin 2, intestinal/tracheal - rat (fragment)	0.13
SL176m13	Z73424	Caenorhabditis elegans cosmid C44B9, complete sequence.	0.00084	<NONE>	<NONE>	<NONE>
SL176t7	Z83119	Caenorhabditis elegans cosmid R05H10, complete sequence.	0.38	<NONE>	<NONE>	<NONE>
SL177m13	AL022279	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y43F11; HTGS phase 1.	0.00064	ANX7_BOVIN	ANNEXIN VII (SYNEXIN) (FRAGMENT)>PIR2:A27695 synexin - bovine (fragment)	0.0018
SL177t7	AC002416	Human Chromosome X, complete sequence.	1.8e-17	<NONE>	<NONE>	<NONE>
SL179m13	AF039052	Caenorhabditis elegans cosmid T22D1.	0.030	CMU23045_8	Cepaea nemoralis complete mitochondrial genome; ATPase subunit 8>GP:CMU23045_8 Cepaea nemoralis complete mitochondrial genome; ATPase subunit 8	0.98
SL179t7	L41631	Mus musculus glucokinase gene, complete cds.	0.017	<NONE>	<NONE>	<NONE>

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL181m13	Z98867	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1.	0.017	PS0245	hypothetical protein (cpcG4 region) - Anabaena sp. (strain PCC 7120) (fragment)>GP:ANARODCORA_6 Anabaena sp; cpcF gene, 3' end; cpcG1, cpcG2, cpcG3, and cpcG4 genes, complete cds; and unknown ORF, 3' end	0.99
SL181t7	Z98867	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1.	0.018	PS0245	hypothetical protein (cpcG4 region) - Anabaena sp. (strain PCC 7120) (fragment)>GP:ANARODCORA_6 Anabaena sp; cpcF gene, 3' end; cpcG1, cpcG2, cpcG3, and cpcG4 genes, complete cds; and unknown ORF, 3' end	0.99
SL191m13	Z98867	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1.	0.019	<NONE>	<NONE>	<NONE>
SL195m13	AC004626	*** SEQUENCING IN PROGRESS *** Homo sapiens chromosome #16q12.1+16q22/23+1q11/12 BAC clone CIT987SK-A-427H10; HTGS phase 1, 15 unordered pieces.	0.050	HSU55091_1	Human isolate HR015 T cell receptor V-beta complementarily determining region 3 mRNA, partial cds	1.0
SL195t7	AC004626	*** SEQUENCING IN PROGRESS *** Homo sapiens chromosome #16q12.1+16q22/23+1q11/12 BAC clone CIT987SK-A-427H10; HTGS phase 1, 15 unordered pieces.	0.053	S54078	probable membrane protein YPR056w - yeast (Saccharomyces cerevisiae)>GP:SC9499X_12 S;cerevisiae chromosome XVI cosmid 9499; Unknown; YP9499;12, unknown, len:338, CAI: 0;12, similar to S44455, transcription factor BTF2 chain p34, (29;3% identit	0.64
SL197m13	AF003134	Caenorhabditis elegans cosmid ZC581.	0.99	<NONE>	<NONE>	<NONE>
SL197t7	U43400	Human herpesvirus-7 (HHV7) JI, complete virion genome.	0.99	<NONE>	<NONE>	<NONE>
SL19t7	V00073	Sindbis virus sequence complementary to 26S messenger RNA.	3.2e-09	<NONE>	<NONE>	<NONE>

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL201m13	AB001684	Chlorella vulgaris C-27 chloroplast DNA, complete sequence.	0.0013	SIU05069_1	Simian immunodeficiency virus SIVRhE543 clone 5-4 envelope glycoprotein (env) gene, V1 region, partial cds	1.0
SL201t7	AB001684	Chlorella vulgaris C-27 chloroplast DNA, complete sequence.	0.0014	HUMLTBP_1	Homo sapiens (clone H 4;4) latent transforming growth factor- beta binding protein (LTBP-1L) gene, partial cds; Latent transforming growth factor-binding protein	1.0
SL204m13	Z49910	Caenorhabditis elegans cosmid F44G4, complete sequence.	1.0e-11	CEF44G4_1	Caenorhabditis elegans cosmid F44G4, complete sequence; F44G4;1; Similarity to 35;1KD hypothetical yeast protein (Swiss Prot accession number P38805); cDNA EST CEMSE65F comes from this	5.6e-72
SL204t7	Z49910	Caenorhabditis elegans cosmid F44G4, complete sequence.	9.3e-12	CEF44G4_1	Caenorhabditis elegans cosmid F44G4, complete sequence; F44G4;1; Similarity to 35;1KD hypothetical yeast protein (Swiss Prot accession number P38805); cDNA EST CEMSE65F comes from this	2.3e-71
SL28m13	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>
SL28t7	Z84469	Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 390O13; HTGS phase 1.	2.9e-53	<NONE>	<NONE>	<NONE>
SL29m13	AC004465	Homo sapiens 12q24 PAC RPCI3-363I18 (Roswell Park Cancer Institute Human PAC library) complete sequence.	3.3e-09	MCRA_METFE	METHYL-COENZYME M REDUCTASE ALPHA SUBUNIT (EC 1.8.-.-)>GP:MEFMCRC_5 M;fervidus methyl coenzyme M reductase component C genes mcrA, mcrB, mcrC, mcrD, and mcrG, complete cds; Methyl coenzyme M reductase alpha subunit	0.95
SL29t7	AC004465	Homo sapiens 12q24 PAC RPCI3-363I18 (Roswell Park Cancer Institute Human PAC library) complete sequence.	0.97	MCRA_METFE	METHYL-COENZYME M REDUCTASE ALPHA SUBUNIT (EC 1.8.-.-)>GP:MEFMCRC_5 M;fervidus methyl coenzyme M reductase component C genes mcrA, mcrB, mcrC, mcrD, and mcrG, complete cds; Methyl coenzyme M reductase alpha subunit	0.97

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL4M13	D42085	Human mRNA for KIAA0095 gene, complete cds.	2.0e-27	HUMKIAAP_1	Human mRNA for KIAA0095 gene, complete cds; KIAA0095 gene is related to S;cerevisiae NIC96 gene	3.6e-12
SL54m13	Z68694	Human DNA sequence from cosmid cU177E8, between markers DXS366 and DXS87 on chromosome X.	4.9e-28	HUMF8L1A_1	Human factor VIII gene L1 element insertion DNA; Unknown protein; ORF; putative	1.2e-12
SL61t7	AB001684	Chlorella vulgaris C-27 chloroplast DNA, complete sequence.	0.00083	AF004841_1	Homo sapiens CDO mRNA, complete cds; Immunoglobulin superfamily member; contains fibronectin type III-like domain	1.0
SL62t7	AC004153	*** SEQUENCING IN PROGRESS *** Plasmodium falciparum 3D7 chromosome 12 PFYAC812 genomic sequence; HTGS phase 1, 26 unordered pieces.	1.0	<NONE>	<NONE>	<NONE>
SL68m13	AC004157	*** SEQUENCING IN PROGRESS *** Plasmodium falciparum 3D7 chromosome 12 PFYAC293 genomic sequence; HTGS phase 1, 18 unordered pieces.	0.00071	<NONE>	<NONE>	<NONE>
SL68t7	AJ226619	Ciona intestinalis genomic fragment, clone 17H6, genomic survey sequence.	0.064	<NONE>	<NONE>	<NONE>
SL69m13.fsa	Z22789	H.sapiens CA/GT repeat polymorphism sequence.	1.9e-22	AE001179_2	Borrelia burgdorferi (section 65 of 70) of the complete genome; Competence protein F, putative; Similar to GB:M59751 SP:P31773 PID:1573409 percent identity: 27;00; identified by sequence	1.0
SL69t7	AL010138	Plasmodium falciparum DNA *** SEQUENCING IN PROGRESS *** from contig 3-66, complete sequence.	0.21	AE001179_2	Borrelia burgdorferi (section 65 of 70) of the complete genome; Competence protein F, putative; Similar to GB:M59751 SP:P31773 PID:1573409 percent identity: 27;00; identified by sequence	1.0
SL75m13	AC002536	Human Chromosome 11 pac pDJ1075I20, complete sequence.	1.0	BTRNAT3_1	B;taurus mRNA for complete thrombospondin	0.0074

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL77t7	AF012886	Buchnera aphidicola UDP-N-acetylmuramate: L-alanine ligase (murC157), D-alanine: D-alanine ligase (ddlB), cell division protein (ftsA), cell septation protein (ftsZ), and pfs genes, complete cds.	0.40	<NONE>	<NONE>	<NONE>
SL86m13	Z69790	Caenorhabditis elegans cosmid F33C8, complete sequence.	0.020	<NONE>	<NONE>	<NONE>
SL86t7	U39368	Acanthonevra sp. 16S ribosomal RNA gene, mitochondrial gene encoding mitochondrial RNA, partial sequence.	0.054	<NONE>	<NONE>	<NONE>
SL90m13	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>
SL94m13	X95276	P.falciparum complete gene map of plastid-like DNA (IR-B).	0.0096	SHFORF_1	Shigella sonnei DNA for 26 ORFs, complete cds; ORF1	0.15
SL94t7	AL022313	Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 1119A7; HTGS phase 1.	6.0e-18	A46010	X-linked retinopathy protein (C-terminal, clone XEH.8c) - human (fragment)>GP:S58722_1 X-linked retinopathy protein (3' region, clone XEH;8c) [human, mRNA Partial, 390 nt]; This sequence comes from Fig; 5	5.7e-07

CLAIMS

WE CLAIM:

1. A method of diagnosing cancer, tumor progression, hyperproliferative cell growth or accompanying biological and physical manifestations comprising:

(a) providing a polynucleotide probe that comprises a sequence capable of hybridizing to any one of the sequences shown in SEQ ID NO:1-339 or complement thereof;

(b) contacting a biological sample for diagnosis with said probe under hybridizing conditions that permit formation of a duplex; and

(c) determining the presence of said duplex.

2. The method of claim 1, wherein said polynucleotide probe comprises at least eight contiguous nucleotides of any of SEQ ID NO:1-339 or complement thereof.

3. The method of claim 2, wherein said polynucleotide probe comprises 8 contiguous nucleotides of the sequences of the clones selected from the group consisting of SL-5, SL-6, SL-9, SL-11, SL-13, SL-68, SL-69, SL-86, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, SL-177, SL-195, and SL-197.

4. A method of diagnosing cancer, tumor progression, or hyper-proliferative cell growth comprising:

(a) providing an antibody capable of binding to a polypeptide encoded by any one of SEQ ID NO:1-339 or complement thereof;

(b) contacting a biological sample for diagnosis with said antibody under binding conditions that permit formation of an antibody-polypeptide complex; and

(c) determining the presence of said complex.

5. The method of claim 4, wherein said antibody is capable of binding to a polypeptide comprising at least six contiguous amino acid of a polypeptide encoded by any one of SEQ ID NO:1-339 or complement thereof.

6. The method of claim 5, wherein said polypeptide comprises at least six contiguous amino acids of a polypeptide encoded by any one the sequences of the clones selected from the group consisting of SL-5, SL-6, SL-9, SL-11, SL-13, SL-68, SL-69, SL-86, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, SL-177, SL-195, and SL-197.

7. A diagnostic kit comprising:

(a) a diagnostic reagent comprising a polynucleotide probe that comprises a sequence capable of hybridizing to any one of SEQ ID NO:339 or complement thereof when said sequence is present in a test biological sample;

(b) a normal biological sample; and

(c) instructions for detecting differences that exist between the levels of duplexes in said test biological sample as compared to said normal biological sample.

8. A method of treating a mammal with cancer, tumor progression, hyperproliferative cell growth or accompanying biological and physical manifestations, said method comprising administering to said mammal a composition that comprises a therapeutically effective amount of a polynucleotide comprising a sequence capable of hybridizing under stringent conditions to any one of SEQ ID NO:1-339 or complement thereof.

9. The method of claim 8, wherein said polynucleotide comprises at least eight contiguous nucleotides of any of SEQ ID NO:1-339 or complement thereof.

10. The method of claim 9, wherein said polynucleotide is an antisense construct.

11. The method of claim 9, wherein said polynucleotide is a ribozyme construct.

12. An isolated polynucleotide selected from the group consisting of:

(a) a polynucleotide comprising the nucleotide sequence of any one of SEQ ID NO:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polynucleotide encoding a variant of the polypeptide encoded by (a); and

(c) a polynucleotide encoding a protein expressed by a polynucleotide having the sequence of at least one of sequences of (a).

13. A vector comprising the polynucleotide of claim 12.

14. A host cell comprising the vector of claim 13.

15. A composition comprising a polypeptide, wherein the polypeptide is selected from the group consisting of:

(a) a polypeptide encoded by any one of the polynucleotides of claim 12, and

(b) a variant of the polypeptide of (a).

```
Sequence Range: 1 to 1383

              10          20          30          40          50          60
TTA CTC ACT ATA GGG CTC GAG CGG CCG CCC GGG CAG GTG TAA AAA TAA AAT GAC AGT TTG AAC ATA CAA
AAT GAG TGA TAT CCC GAG CTC GCC GGC GGG CCC GTC CAC ATT TTT ATT TTA CTG TCA AAC TTG TAT GTT
    <E   S   Y   P   E   L   P   R   G   P   L   H   L   F   L   I   V   T   Q   V   Y   L

70          80          90         100         110         120         130
AAC CCA CCC CAT TCC TAT AGA GCC TAG TAC TAC ACT ACC CCC TCC CAA CTT TAG CCT CCA CAT ATA GTA
TTG GGT GGG GTA AGG ATA TCT CGG ATC ATG ATG TGA TGG GGG AGG GTT GAA ATC GGA GGT GTA TAT CAT
<V   W   G   M   G   I   S   G   L   V   V   S   G   G   G   L   K   L   R   W   M   Y   Y

140         150         160         170         180         190         200
ATG TGC TTG GAA CAC AAA AAA CAC TTC ATA AAT TGT GCT GAA TGA AAT CAT TTC CAT GAG TGT TTA TGG
TAC ACG AAC CTT GTG TTT TTT GTG AAG TAT TTA ACA CGA CTT ACT TTA GTA AAG GTA CTC ACA AAT ACC
<H   A   Q   F   V   F   F   V   E   Y   I   T   S   F   S   I   M   E   M

210         220         230         240         250         260         270
ATT TTG AGT TCA TTT GTA CCT TTT ACC TAA AAT TCT AGC CAC TTT AAT TTG GAG AGT TTC CAG AGC AAA
TAA AAC TCA AGT AAA CAT GGA AAA TGG ATT TTA AGA TCG GTG AAA TTA AAC CTC TCA AAG GTC TCG TTT

 280         290         300         310         320         330         340
GGA CCT TTT ACC TAA AAT TCT AGC CAC TTT AAT TTG GAG AGT TTC CAG AGC AAA GGG CAC AGA TCC CAG
CCT GGA AAA TGG ATT TTA AGA TCG GTG AAA TTA AAC CTC TCA AAG GTC TCG TTT CCC GTG TCT AGG GTC

  350         360         370         380         390         400         410
GCA TAA CAA CGC TTT GCG TAT ACA GCA ACC AAT ATC TTG TCA ACC CAA GAA AGT TCC TCC ATT GAT ACC
CGT ATT GTT GCG AAA CGC ATA TGT CGT TGG TTA TAG AAC AGT TGG GTT CTT TCA AGG AGG TAA CTA TGG

   420         430         440         450         460         470         480
TAG TAG AAA TAG CCC AGT TTT TAA AGT CCT CAA AAC TGT AAC AAA TTA CTT GTT TTT AAA ATT TAA CTT
ATC ATC TTT ATC GGG TCA AAA ATT TCA GGA GTT TTG ACA TTG TTT AAT GAA CAA AAA TTT TAA ATT GAA

     490         500         510         520         530         540         550
AAA TTA ATA CAA TCA GAT TTT TGT GTT ATT TGG GTA TTA GAG TAT GTT AAA GCA CAT ATA TCC CAG AGA
TTT AAT TAT GTT AGT CTA AAA ACA CAA TAA ACC CAT AAT CTC ATA CAA TTT CGT GTA TAT AGG GTC TCT

      560         570         580         590         600         610         620
CAT AGA GTT TCC GTT TCA AAA AGT CAT GCA TTC ATG TGT GCT AAT GAC AAT CCT ATC CTG ACC CGC TAT
GTA TCT CAA AGG CAA AGT TTT TCA GTA CGT AAG TAC ACA CGA TTA CTG TTA GGA TAG GAC TGG GCG ATA

      630         640         650         660         670         680         690
GTG ACT TGT ATC TCT AAA CCA TAG GCT TTC CTG AAT TTT ATC TGT TAA TTT AAC CCT GAT TTC TCA GCA
CAC TGA ACA TAG AGA TTT GGT ATC CGA AAG GAC TTA AAA TAG ACA ATT AAA TTG GGA CTA AAG AGT CGT

         700         710         720         730         740         750
GCA GCT TCT CTT TGT AAA TAG ACT TGC CTC TTC TGT GTC TGA CCT CTG CTC CTC ATA ATC AGA TTA ACT
CGT CGA AGA GAA ACA TTT ATC TGA ACG GAG AAG ACA CAG ACT GGA GAC GAG GAG TAT TAG TCT AAT TGA

760         770         780         790         800         810         820
CAG ATA AAG CTG CTT CAG GGA AGA GGT CAA AAC CGT TGC CAA AAA TAG TAG TTG CCC TAC TTC AGT CTA
GTC TAT TTC GAC GAA GTC CCT TCT CCA GTT TTG GCA ACG GTT TTT ATC ATC AAC GGG ATG AAG TCA GAT

830         840         850         860         870         880         890
TTT TCA ACA GAG TAG CCA GGA GAT CCT GTT CAC ACC AAA GTC CAA TCA GCC CTA CTG TTA GCA CTC TGC
AAA AGT TGT CTC ATC GGT CCT CTA GGA CAA GTG TGG TTT CAG GTT AGT CGG GAT GAC AAT CGT GAG ACG

900         910         920         930         940         950         960
TCA CAA GCC TCC AGT GGC TTC CGA CCT CAC TCA CAG TAA AAG CCA AGT CAT CCT TTA GCC TAT GAT GTC
AGT GTT CGG AGG TCA CCG AAG GCT GGA GTG AGT GTC ATT TTC GGT TCA GTA GGA AAT CGG ATA CTA CAG

 970         980         990        1000        1010        1020        1030
CTA CAT GAT TTG AAT TCC CTT CCA TTG ATT TTT GTC ACT GAT TTT TAA AAA TCC AAA TTC ATT CTC ATA
GAT GTA CTA AAC TTA AGG GAA GGT AAC TAA AAA CAG TGA CTA AAA ATT TTT AGG TTT AAG TAA GAG TAT

 1040        1050        1060        1070        1080        1090        1100
CAG CTG AAT TGT CCT CTT TGC TTT AAG TAT GCC AGG ATT ATT TCT ACC TCA GGG CCT TTG CAC TTG ATA
GTC GAC TTA ACA GGA GAA ACG AAA TTC ATA CGG TCC TAA TAA AGA TGG AGT CCC GGA AAC GTG AAC TAT

  1110        1120        1130        1140        1150        1160        1170
TTC CCT TCA CCT TTT CCA AGA TAG TTA TTC CCT CAC CTC AGT CAA GCC TTT ATT TAG ATG CCC CCT TCT
AAG GGA AGT GGA AAA GGT TCT ATC AAT AAG GGA GTG GAG TCA GTT CGG AAA TAA ATC TAC GGG GGA AGA

    1180        1190        1200        1210        1220        1230        1240
CAT CAA GGC ATT CTC TGA TCT CCT TAT TTA AAT GTA TGA CAC CCC TTC TTT GCT TTA CAT TTA ATC AGA
GTA GTT CCG TAA GAG ACT AGA GGA ATA AAT TTA CAT ACT GTG GGG AAG AAA CGA AAT GTA AAT TAG TCT

     1250        1260        1270        1280        1290        1300        1310
ACA TGT GTC ACT ATC TAG CAT ATA ATA CAT TTG CTT GAC CTC TTT TGT TTA CTG TCT ATG CCT CCT GAA
TGT ACA CAG TGA TAG ATC GTA TAT TAT GTA AAC GAA CTG GAG AAA ACA AAT GAC AGA TAC GGA GGA CTT

      1320        1330        1340        1350        1360        1370        1380
TAC TGT GTA AGC TCC ACG ATA CAG GCA CTT TTC TCT ATT TCG AGC ACT GTT GTA TTA CAG AGC CTT AAA
ATG ACA CAT TCG AGG TGC TAT GTC CGT GAA AAG AGA TAA AGC TCG TGA CAA CAT AAT GTC TCG GAA TTT
```

FIGURE 1

Sequence Range: 1 to 1815

```
                10          20          30          40          50          60
ACT TTT TGT TCA TTT TGA TTT TTG GAT AAT GCA AAA TTA TAG ATT TTT TAA AAA TTA TAT TCA AAG AAT
TGA AAA ACA AGT AAA ACT AAA AAC CTA TTA CGT TTT AAT ATC TAA AAA ATT TTT AAT ATA AGT TTC TTA

 70          80          90         100         110         120         130
ACT GAG TGC AAG ACA ATC TTT CTA GGT TAA AAA ATA TCT TAT AAA CCT GAA TTG TCA ATT ATT ATT GTA
TGA CTC ACG TTC TGT TAG AAA GAT CCA ATT TTT TAT AGA ATA TTT GGA CTT AAC AGT TAA TAA TAA CAT

140         150         160         170         180         190         200
TCC CAG ATG TAT GGA AGT TAA TGG ATA GTC AGT AAC ATA CAG GAC TAG CAG AAG GTT TGT TGT TAT AGG
AGG GTC TAC ATA CCT TCA ATT ACC TAT CAG TCA TTG TAT GTC CTG ATC GTC TTC CAA ACA ACA ATA TCC

210         220         230         240         250         260         270
TAA TCT GGA GAG AAG CCA GGT AAG TGG AAT TTG GGA TTT GCT GCT GTT GCC AGA AAG CAG CAC AGA GAC
ATT AGA CCT CTC TTC GGT CCA TTC ACC TTA AAC CCT AAA CGA CGA CAA CGG TCT TTC GTC GTG TCT CTG

 280         290         300         310         320         330         340
ATG GTA AGT GGC AAG ACC CAG GTA ACT AAA ACA ACC ATG TCT TAG TCC TTT TAT GCT GCT GTA ACA GAA
TAC CAT TCA CCG TTC TGG GTC CAT TGA TTT TGT TGG TAC AGA ATC AGG AAA ATA CGA CGA CAT TGT CTT

  350         360         370         380         390         400         410
TAT CAC AGA CTG AGT AAT TTA TAA TGA ACA GAA CTT TAT TTG TCT TCT GGT TCT GGA GAC TGG GAA ATC
ATA GTG TCT GAC TCA TTA AAT ATT ACT TGT CTT GAA ATA AAC AGA AGA CCA AGA CCT CTG ACC CTT TAG

  420         430         440         450         460         470         480
TAA GAG CGT GGC ATT GAC ATA TGG TGA GGG CAT TTG TGC CTC ATC ATC CCA TGA CAG AAG ATG GAA ATG
ATT CTC GCA CCG TAA CTG TAT ACC ACT CCC GTA AAC ACG GAG TAG TAG GGT ACT GTC TTC TAC CTT TAC

    490         500         510         520         530         540         550
CAA GAG AGC TCA AAA GCA AGA GAG CAA ATG GGG CCA AAC TTG CTT TTT ATA ACA AGC CAC TCT TGT GAT
GTT CTC TCG AGT TTT CGT TCT CTC GTT TAC CCC GGT TTG AAC GAA AAA TAT TGT TCG GTG AGA ACA CTA

   560         570         580         590         600         610         620
AAT GAA CCA ACT CAA ACA ATA AAG ACA TAA ATC CAT TCA TGA GGG CAG AGC CCT CAA GGA TGA ATC ACT
TTA CTT GGT TGA GTT TGT TAT TTC TGT ATT TAG GTA AGT ACT CCC GTC TCG GGA GTT CCT ACT TAG TGA

      630         640         650         660         670         680
TCA CTT CTT A ATG GCC TCA GCT TCT AAT ACC ATC ACA ATA GTA ATT CAG TTT CAA CAT GGG TTT TAT
AGT GAA GAA T TAC CGG AGT CGA AGA TTA TGG TAG TGT TAT CAT TAA GTC AAA GTT GTA CCC AAA ATA
               M   A   S   A   S   N   T   I   T   I   V   I   Q   F   Q   H   G   F   Y>

690         700         710         720         730         740         750
AGG GAC GTT GGA ACC ACA GCA AAC TGT AAC CAT TTT GAT TTC CTT ATT TGC ACC ATT TTA AAA AAA CCT
TCC CTG CAA CCT TGG TGT CGT TTG ACA TTG GTA AAA CTA AAG GAA TAA ACG TGG TAA AAT TTT TTT GGA
 R   D   V   G   T   T   A   N   C   N   H   F   D   F   L   I   C   T   I   L   K   K   P>

760         770         780         790         800         810         820
ATT TAT TTA ACG ACT GTT TAT TCA GTG CCT ATT CTG TTG TGT TGG GGA CTA GAG GTA ATT ACA AAG GGA
TAA ATA AAT TGC TGA CAA ATA AGT CAC GGA TAA GAC AAC ACA ACC CCT GAT CTC CAT TAA TGT TTC CCT
 I   Y   L   T   T   V   Y   S   V   P   I   L   L   C   W   G   L   E   V   I   T   K   G>

 830         840         850         860         870         880         890
ATA AGA CAA ACA GTC ACC CAC TCT GGT GAT GCT TCC CTT ATC TTC ATA ATG CAT TTG ATC CTG TG ATT
TAT TCT GTT TGT CAG TGG GTG AGA CCA CTA CGA AGG GAA TAG AAG TAT TAC GTA AAC TAG GAC AC TAA
 I   R   Q   T   V   T   H   S   G   D   A   S   L   I   F   I   N   H   L   I   L>

   900         910         920         930         940         950         960
CTT TGG CAC ATG AGT CCA TTG CAT CTT GCA TAT TAG TGT CCA GTA AGT TTT TCC TGA CCA ATT GAT AAT
GAA ACC GTG TAC TCA GGT AAC GTA GAA CGT ATA ATC ACA GGT CAT TCA AAA AGG ACT GGT TAA CTA TTA

    970         980         990        1000        1010        1020        1030
ATA GAT ATA CAT TGG TAG CAG TTT TGT GTA TAT TTT TAT AGT TAG ATG TTG TTG GCA CAT GTG ACT TGT
TAT CTA TAT GTA ACC ATC GTC AAA ACA CAT ATA AAA ATA TCA ATC TAC AAC AAC CGT GTA CAC TGA ACA

    1040        1050        1060        1070        1080        1090        1100
GTC TCA GAA AAA TAC AGA AAA TGG TTA AAG ACA GGA GGA TAC TAC CCT GAT TTC TCT GTT CAT TAA AGA
CAG AGT CTT TTT ATG TCT TTT ACC AAT TTC TGT CCT CCT ATG ATG GGA CTA AAG AGA CAA GTA ATT TCT

     1110        1120        1130        1140        1150        1160        1170
ACA GCT ATT TGG GGG GAA AAC CTG ATA CAA TTA TTT GAG CAT GTG GCT TAA AGA TTA GAC CTA TAA ACA
TGT CGA TAA ACC CCC CTT TTG GAC TAT GTT AAT AAA CTC GTA CAC CGA ATT TCT AAT CTG GAT ATT TGT

      1180        1190        1200        1210        1220        1230
ATT CAG GAG CAT CTT CCA GCA AAC TGT GTG AGA ATT CAC AGA AAT AAA CCT GGT AGG TTT GTG CTA TGT
TAA GTC CTC GTA GAA GGT CGT TTG ACA CAC TCT TAA GTG TCT TTA TTT GGA CCA TCC AAA CAC GAT ACA

1240        1250        1260        1270        1280        1290        1300
TAT TCA CAT GGG CTG TTA ACT CTT TTC CAT TCC TAG GTC CTT TAT TTC CCT GCC CTC CTC AAT CTC ATG
ATA AGT GTA CCC GAC AAT TGA GAA AAG GTA AGG ATC CAG GAA ATA AAG GGA CGG GAG GAG TTA GAG TAC

1310        1320        1330        1340        1350        1360        1370
CTC TTG AGA TTT TTA ACT ATA TTA CTT CTT TAC AAA GTC ATC TTC AAA ATG ATT CAT TTT GGA TAG CAA
```

FIGURE 2

SL5 Immunohistochemistry Comparison of Tumor vs Normal

	1	2	3	4	5	6	7	8	9	10
A	Adrenal	Adrenal	Adrenal	Ovary	Ovary	Ovary	Ovary	Breast	Breast	Breast
Tumor	(+4)	(++4)	(+2)	(++4)	(++4)	(+4)	(++4)	na	(+4)	(+1)
NC	(-)	(-)	(-)	wp	(-)	(-)	(-)	na	(-)	(-)
Normal	(+2)	(+2)	(+2)	(+1)	(+1)	na		(++1)	na	na
NC	(-)	(-)	(-)	(-)	(-)	na		(-)	na	na
B	Colon	Colon	Colon	Colon	Prostate	Prostate	Prostate	Prostate	Uterus	Cervical
Tumor	(++4)	(++4)	(+++4)	(+4)	(+2)	(++3)	(+3)	(++3)	(++4)	(+2)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Normal	(+2)	(+1)	(+2)	(++3)	?	(++2)	(+1)	(++2)	(+2)	(++2)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
C	Kidney	Kidney	Kidney	Kidney	Pancreas	Pancreas	Pancreas	Pancreas	Leiomyo-	Leiomyo-
Tumor	(+4)	(+4)	(+4)	(++4)	(+++4)	(++4)	(++4)	(+++4)	(+4)	(++4)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	EDG	EDG
Normal	?	?			(+1)	(+1)	(++2)	(+1)		
NC	(-)	(-)			(-)	(-)	(-)	(-)		
D	Liver	Liver	Liver	Stomach	Stomach	Stomach	Lymphoma	Lymphoma	Lymphoma	Lymphoma
Tumor	(+4)	(+4)	(++4)	(-)	na	na	(+4)	(+2)	(+2)	(+1)
NC	(-)	(-)	(-)	(-)	na	na	(-)	(-)	(-)	(-)
Normal	na	na	na	na	na	na	(+1)	(+1)	?	(-)
NC	na	na	na	na	(-)	(-)	(-)	na	(-)	(-)
E	Seminoma	Seminoma	Seminoma	Thyroid	Thyroid	Thyroid	Thyroid	Fibro-	Fibro-	Fibro-
Tumor	(+3)	(+4)	(++4)	(++4)	na	na		(+4)	(+4)	(++4)
NC	(-)	(-)	(-)	EDG	wp	EDG	EDG	(-)	(-)	(-)
Normal	(++2)	(+1)	(+2)	(+1)	(+1)	(++2)	(-)	(-)	purk(+)	(+2)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	na
F	Melanoma	Melanoma	Melanoma	Chorio-	Carcinoid	Chorio-	Basal Cell	Basal Cell	Basal Cell	Germ Cell
Tumor	(+++4)	(+4)	(+++4)	(+4)	(+4)?	(+1)	(++3)	(+3)	(+1)	(++4)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	EDG
Normal							(+1)	(++1)		(+1)
NC							(-)	(-)		(-)

Staining Intensity: -, no staining; + weak; ++ medium; +++ strong staining
Staining Percentage: 1: 0-25%; 2: 26-50%; 3: 51-75%; 4: 76-100%
For example: (++3) stands for 51-75% of cells have medium staining
NC: Negative Control; na: no tissue materials on slides

FIGURE 3

SEQUENCE LISTING

<110> Zhang, Jimmy
Astel, Jon H.
Carroll III, Eddie
Endege, Wilson O.
Ford, Donna M.
Monahan, John E.
Schlegel, Robert
Steinmann, Kathleen E.

<120> GENES AND GENE EXPRESSION PRODUCTS THAT
ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

<130> 200130.463

<140> US
<141> 1999-06-11

<160> 339

<170> FastSEQ for Windows Version 3.0

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ttaagagacc atcctggcca acatgatgaa accctgtctc tactaaaaat acaaaaagta 180
gctgggcgtg gtggcatact cttacaatcc cagctacttg ggaggctgag gcaggagaat 240
cacttgaacc taggaagcag aggttgcagt gggccaagat cacaccacta tactctagcc 300
tgggcgacag aggtggggaa aaaagtagga cccctgtcct atattcaggt ttttctcaca 360
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ttaacgaagc attaaaatca gatgtaaaaa aagaaaaaaa aaggcaggga aatatttaca 660
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tgtataaaga ggagacgnca ccttagtaat gccagggata gagaaaaccc nggatataat 780
atggggtttt taatgccgga acatggngga aactaggang agccgagatg ganctggtcc 840
ctgaagtgaa ctggttnagn tattctgggn accctcagga gggccttgca agtgtgtggg 900
taggnaaaaa actgggctgg gcaaactact tggntncaag tttttttatg ggagaccgaa 960
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accc 1024

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ntangcgatc agctattgna cggaatctct gtganantga nnagctnana tcntctccan     180
ggaanaacag ntccncaang ctntattnga gacagagcta tgacannnnc ntntntactc     240
ngacagtcct taggaaccnc gcaantgana nngnggngat gcnactagga nctgncncnn     300
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gaccgaacct gagactgacg tcgcctcanc tatngacnnn nnnccnatnn tgagtgnaag     420
cgtnctnatg ngacactcgg ggnccacgat gcanancgct ancnnccccnn ggngtgncan    480
tnagnnatcn ttgcncatat tncgnatntt gacatgtgta atgatngaga tctcatannt     540
gcactgtgct tctcatctat taacgctaaa ccatgacagt ttnctttcat tgccacntnc     600
tttcagtgac ccnanatntt atcgctanat attcnatcct tcaacngtag cattnttcct     660
gctnttcttt nccnaaagca tcttctttcc caactcactc cagggccaaa tactctcanc     720
cnnctcactn tangntctcn gntcacggtc tttcccgtga cacgtcattc aattcccctc     780
gnaagctanc ccaggcccaa ctttnntctt cttcaccggn nntaacttaa tcctggggga     840
aggnaangcn nggntcttta gccttgntcc agaaccttng gtagccccgg ncacaaatcc     900
naaaaacctt tgcaggtttg ggggttggac cccgggncct tttttcccgg gtngggttta     960
nggngggaac cgnattttta nnatngacca aggaaggctg gggtcctttg gaaagncccc    1020
cngg                                                                 1024

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ccttttgtag ccttttcctt tagtctcctc ttcccggtgg ttggtaaaaa gaggtgaatt     180
gacagcctat gttgaagaca ctgtgctttt ctcaagaagg acatccaaac agcaagtcta     240
cttctttctc tttaacgatg tgctcattat caccaagaag aagagtgaag aaagttacaa     300
cgtcaatgat tattccttaa gagatcagct attggtggaa tcttgtgaca atgaagagct     360
taattcttct ccagggaaga acagctccac aatgctctat tcaagacaga gctctgccag     420
tcacctcttt actctgacag tccttagtaa ccacgcgaat gagaaagtgg agatgctact     480
aggagctgag acgcagagcg agcgagcccg ctggataact gccctgggac acagcagcgg     540
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taagcagcca gatgaactct ccctgcaggt ggctgacgtc gtcctcatct atcaacgtgt     660
cagcgatggc tggtatgagg gggaacgact acgagatgga gaaagaagct ggtttcctat     720
ggaatgtgcc aaggagataa catgtcaagg ctacaattgn ttaagaatgt ggagagaatg     780
ggacgcttgc taggactgga gaanccacgt gagncttttn aangggcctt tggtactgca     840
agaattgcac cgacacttac cgggcttggt ggttctgggg ctagtttaat ggnaatttgg     900
cccagncttt ttaattaaag gaccggaaac cntggccttt aactttggcc agtggtncgg     960
tntntnatgg aaaaaacttt gggtaccccg gngttgccca ggttagtttt acctaacccc    1020
cccn                                                                 1024

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<213> Homo Sapien

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tgtgatcttg gctcactgct acctccacct cccaggctca cacgatcctc cagcctcagc 120
ctcccaagta gctgcgacta caggtgcacg ccattgcagc tggctaattt ttgtattttc 180
agtagagatg gggtttcccc atgttggcca ggctggtctt gaactcctaa gctcaagcaa 240
ttcacctgcc tcagcctccc agagtgctgg gattactcct aagctcaagc aattcacctg 300
cctcagcctc ccagagtgct gggattactc ctaagctcaa gcaattcatc tgcctcagcc 360
tcccagagtg ctgggattac tcctaaactc aagcaattca cctgcctcag cctcccagag 420
tgctgggatt actcctaagc tcaagcaatt cacctgcctc agcctcccag agtgctggga 480
ttactcctaa gctcaagcaa ttcacctgcc tcagcctccc agagtgctgg gattactcct 540
aagctcaagc aattcacctg cctcagcctc ccagagtgct gggattacag gtgtgaagca 600
ctacacccag cccattcttc ccttttaacc aaggaagaaa ttacacaatg aaacaaatac 660
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gggaaaaaca caggatccgt ttacttctan gaanggcgtt tctgtgaatc taagaagggg 780
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tgggaaaccc caggngngtn tngcaaaggc caagggaaag gcctcaaggg ggggcatgaa 960
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<210> 5
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<213> Homo Sapien

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gccgtcnaga cncntgcngn agcgnncgnc ngtgggatgg nnanntgcng annncgcccn 60
tccntcctaa tacnactcac tataggcgnn agnggccacn tcnagctngn gnnngaagtt 120
ggnntgcngt gnagtctgtn cctgnggcan cgcgtcatgc atgactttgg gtcattgctg 180
ctctccttgc ctttagggga gggtcctggt gctctgtgag cagattngac cctaggggtg 240
aagtcatctn gcccctgttc tgagccgaga gctggncagg gngcgtctca catcattcct 300
ctgcccctgt ngncgcatgg gaaatcctaa acaggctctg tggnaaangc tgnnccaagg 360
cgcctcctgg gcagncganc catcagnnga tcgnnagccn ngaancgatg gcccgggaaa 420
accaaaccag gaannaanca caccgtgcga aaggnattgg tgaacgaact gaaaaattgt 480
aaagctctta aggactttca tgcttgcnag nattnantga canaaaatca ctganncann 540
gaacataaag aaatagccat ggangattca cagtgtanct ngctgancng ctcatntggc 600
cncaagnnat gtttnactna cgnagncnca atganctggt ccttgntnng gctggctttc 660
ttttctgngc aaaacttggn ggnccccttaa ttgggcttan cccaacnaca agacttcctg 720
ggaaaacngg gnanntagga antttgnaag gacaaccaaa ggaaactgga agggaacaaa 780
ttttttggtt cccaaaaccg ggccaagatt gggcttcaaa aancctttga accngggggn 840
ncaattnntn gggnttanat cccccgaaag gaanngggan ggtnttnaag gnaaaanccc 900
nnccaaggaa cccnggtttn gggccntgga agggnccctg gncnnggttt cgaggnnttg 960
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aaag 1024

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<212> DNA
<213> Homo Sapien

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<223> n = A,T,C or G

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gtagatggcc cagccccaag tgttccgatc ttcctgccca aacatattct gtgacggaaa 120
gcctatgttg acctcgtccg gcactcaagg cgtgggcagc ggcctaacgt ctgctgcggg 180
aacacagtcg cgttgaatgc tattctcaag acagacaaaa cagtgggaag acactacgcc 240
aagctgctaa ctccctggcc attgccggac tctttcaccc ccatggactt tccgctggca 300
ttttaaacaa catagtttct tttctctgtc tctttctctt tccctctctc tttctctttc 360
tctctctctc tctctctctc tctctctctc tctcaatctc ataatttctc tctctcgtgc 420
cacgttccca cccaacgctc tctcgcccac ttctactggg gcccacttcc tctcctgctc 480
tctctgtctc aacgtgattg actttcttgt gctgcncagg acttcttgcc cacgtgcgcc 540
ttcaanacgg taaagagctg caactgaacg tgtgagacat ggtgcanata aggctgagag 600
ggcggnggga gagatgccca tgaactcaag tacctgcccg ggcnggccgc tcgaaagggg 660
gaattccagc aaactggcgg ccgttactan tggattcgng ctccggtaca ngcttggggt 720
aatcatggtc aatanctggt ttcctgtggt naaattggtt ntccggctca nnaatttcaa 780
nannanatan naagcncggn aancataaan ttgttaaagc ccnggggttc cctnaatnan 840
tttgncctan tnnaacntta aattngngnt ttnncnncan anngncngnt ttttcaattc 900
cgggaaanct ngtcntnngn agctngcatt atcnanttcg ggccaaangc gcgggg 957

<210> 7
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<212> DNA
<213> Homo Sapien

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cctcagcctc cccagtagtt gggactacag gcgtgtgcca ccacacccgg ctaatttttg 180
tatttgcagt agagacgggg tttcatcatg ttggccaggc tggtctcgaa ctcctggcct 240
caagtgacac gcctgcctca acctcccaaa gtgctgggat tacaggcgtg agccaccgca 300
cctggcctct atgctcgaat ttctactctt agctaatctc tctaacacat atgcccttca 360
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gcctgtatta tctcatggtt gccttctatt tgtgacaagt gctatgaata ttccttttta 480
agaagtgata caaaatcttt tttttttct tgaacaggat ttttaactca gacagtgtaa 540
acatcatgac aattctggaa tgtctgaagt ttgagataga agattgtcta agaaaagctg 600
agattgnctt agctgtttgt ggtatccgaa ttcctctgga acatgggcat caggaaccaa 660
gcgatgccac tgctactggg cagggttttt atattttacc taaacagaga ccaatgacgc 720
tgacctacct taatgaaaat ttcagaaaaa ccatctggaa tcagccccat catgtccaga 780
attggaangg aatctgggga tcaatggaac atacccggaa atacttttnt ttcccccaaa 840
ccaaggnaat ggaatgtcaa aagtattgga gcctaattta aaatggggnt tccntantaa 900
agntttgctt tcanttaatg ggancanttg gcnanntggt tttgggnacc cctgcataat 960
ttaaaccgng nggccagttg gccaaccaan atttcancng gaaagggggt attttaaaag 1020
cccg 1024

<210> 8
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<212> DNA
<213> Homo Sapien

<220>
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<222> (1)...(1024)
<223> n = A,T,C or G

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tactangacg actnactata ggnnnngtnc agtgcgtcgc gatcgggtgt agggttatan 120

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ngcngnnggn ntnctnttgg agagntnngn ngctnanctg ctatgntctc ntggatnnnc     180
tntgccccgca gaaaatnaat gcgttttgaa cagttttagn tttgtgcctc atanattgtg    240
tnantgctat ncattatnnn gnntgcatat ntantctnna nngccnncaa ggcatcgcng     300
atggnctaac atctcaaaac nccttancct acanntganc nntgtggnan actttgnngn     360
ggnantgtgg ntaaaagnac canggggnna atcntggntc agancnctan aaagcattgn     420
ttactacaac tggctcttga atatcccctt gcgctgatat ttgtggtcag ctgcctacag     480
ttgaatatgc agcgtnacac anncnaagct gccagtgcta caattaactg aagcatnact     540
tantntgtaa ncacnatcta anttngcatc agtnctcatg acatncatta catgggacag     600
gggcaagagc agtagctctg gtatgtgaca ttgatcccca gatgccttcc caatctggac     660
atgatggggc tgnnttccca atggttacnc tgaaaatgca ttaagggagg tcagcgtcat     720
ttgtctcatg gatacgnaaa aatctcttnc accctgncca tnaacaggng gcaatcgctt     780
gnggncctga tgnccatgtt ccaaaaggaa tccgatgcca nnagcngctg ggacagtctt     840
aagcttttct tcnccaccct tctatcttga acttncanac gtttccggaa acnccaanga     900
nngttaccac ttgccngacc taaaaaacnc tgttcacgaa nttnaacttn ggatttngga     960
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nnga                                                                 1024
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<213> Homo Sapien

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<223> n = A,T,C or G

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cagcctccca agtagctggg attgtaagag tatgccacca cgcccagcta ctttttgtat     180
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agtgatccac cagagaggag atcctcggcc tccccaagtg ctgggattat aggcatgagc     300
caccgtgccc agcctacttt ctaattaacc aaaaaaaaaa aaaaaaaaaa aaaaaaagcg     360
gccgctgaat tctattctag aattaagcgg ccgctgaatt ctagacctgc ccgggcggcc     420
gctcgagccc tatagtgagt cgtattagga tggaagggcg aattctgcag atatccatca     480
cactggcggc cgctcgagca tgcatntaga gggcccaatt cgccctatag tgagtcgtat     540
tacaattcac tggccgtcgt tttacaacgt cgtgactggg aaaaccctgg cgttacccaa     600
cttaatcgcc ttgcagcaca tccccctttc gccagctggc gtaatagcga agaggcccga     660
ccgatcgncc ttccaacagt tgcgcagcct gaatggcgaa tggacgcgcc ctgtagcggc     720
gcattaancc gccggcgggt gtggtggtta cnccgcancg tgaaccgnta cacttggcan     780
ggncctacgg cccgnttcct ttcgctttct ttcctttcct ttnttggnca cgtttcggcc     840
gggtttcccc cggtnaagct nttaaattng ggggcttccc ntttangggn tcccgaantt     900
anngccttta acgggaccnt gganccccaa aaaactttgg tttangggg angggttcac      960
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cccg                                                                 1024
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<210> 10
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<212> DNA
<213> Homo Sapien

<220>
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<223> n = A,T,C or G

<400> 10

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ncnatcctaa tacgactcac tatagggctn gagcggncga ccggacagng ntnnnggtgg     120
ctnatgccta naatcccagn acttggggag gccnaggatc tcctntntgg tggatcactt     180
gagggcagga gttaanagac catcctggcc aacatgatga aaccctgtct ctactaaaaa     240
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tacanaangt agctgggcgt ggtggcatac tcttacaanc ccagctactt gggaggctga     300
ggcaggagaa tcacttgaac ctaggaagca gaggttgcag tgggccaaga tcacaccact     360
atactctaaa gggcgaattc cagcacactg gcgnccgtta ctagaggatc cgngctcggt     420
nccaagcttg gcgtaatcat ggacanagct gttncctgtg tgaaatgggt aancgctnac     480
aanntnacac aacatacnag ccggaagcat aaagngtnaa gcctggggng cctaatgagt     540
gagctaactc acattaattg cgttgcgctc actgcccgct ttncagntcg ggaaacctgc     600
cgtgccagct gcattaatga atcggccacg cncnggggag aggcggantg cgaatgggcg     660
cttcttncgn ttctcgctta ctgactngat gcggttcggc ccattgnntg cagcaaagcg     720
gnatcngctc acttnaaagg cnggnaatnc cggttntccc cntgaatccg ggggattacc     780
gcaggtnaag aaccatgggg anccaaaagg ccagctaaaa gggcccggga acccggaaaa     840
aaggcccngt tggttggcgt tttttcanaa ggttccgccc ccttgaccgn ngcnttacaa     900
aaattnggag gcnttaaggt cnnaantggg ggaaaccccc cgggaaattt caggntnccc     960
nggggtttcc cctgggaagt tncttngggg gctttccnnt tcnaaacctg gcgnttaccg    1020
gnaa                                                                1024
```

<210> 11
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 11

```
gtncgtctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc      60
ttgagcggcc gcccgggcag gtacgcgggg gggcatttcc ctgacgactc gtgtgtgccg     120
tgggggagcg gtagatggcc cagccccaag tgttccgatc ttcctgccca aacatattct     180
gtgacggaaa gcctatgttg acctcgtccg gcactcaagg cgtgggcagc ggcctaacgt     240
ctgctgcggg aacacagtcg cgttgaatgc tattctcaag acagacaaaa cagtgggaag     300
acactacgcc aagctgctaa ctccctggcc attgccggac tctttcaccc ccatggactt     360
tccgctggca ttttaaacaa catagtttct tttctctgtc tctttctctt tctctctctc     420
tttctctttc tctctctctc tctctctctc tctctctctg tcaatctcat aatttctctc     480
tctcgtgcca cgttcccacc caacgctctc tcgcccactt ctactggggc ccacttcctc     540
tcctgctctc tctgtctcaa cgtgattgac tttcttgtgc tgcccaggac ttcttgccca     600
cgtgcgcctt caaaacggta agagctgcaa ctgaacgtgt ganacatggt gcagataggc     660
tgagaggcng cgggaaaaat gcccatgaaa ctcaaagtac tccngccggc gancacgcta     720
angggngant ttcaagcaca nntggcgggc cgttactaan tggattcgaa cctccggtac     780
caaaagcttg ggcgttaatc atgncaanaa gccgttttcc ngtnttaaat ttgttnancc     840
gctcananat tccanacaan cnattacnan gccgggaaan ccaanaaagt tgttaaaacc     900
ctgggggttg ccnnaatgan ttgangctaa ntccnnttta atttncnttg cnccnaangg     960
ccggtttttc cattcgggaa acctgtncgt nccaanctgn atttantgaa tcgggcaaac    1020
tccc                                                                1024
```

<210> 12
<211> 957
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(957)
<223> n = A,T,C or G

<400> 12

```
actttttttt tttttttttt tttttttttt tttttagctt tatttttatt gttgacacta      60
ttacagatag aatgaccaca accatattaa caaaccaaaa acctgtgcac agaaacaaga     120
tgaagaaaat atatcaagat gttaaccaca ctctttggat ggtgaaaaca tgggtgagtt     180
tctcttctac atttctgtaa cttcaaagtt tctataatga acacatttca tatataatgg     240
aaatatatgt agtaaaggtg gactaccaaa acactagaat gatgaccttt caaggaaacc     300
gaaacaaaat aaccataatc ccacaacaac cacacaacta tttcttgttt ttcatctttc     360
```

```
ttcccatctt tgacatttat gcatacttat cactaacacc ctaataatca cagactagtg      420
cacagatcaa gatgttaaca gttaattgtt gttgggtgtt gggaatatgt gtgaattttc      480
tttactgaat ttccaaagtt ttgtatgagt atgtantata tttgtaatgg aaaatacata      540
cataagaatt tantaccaaa nacaccaaag attatttaag gaatttgaga caaaaatatt      600
tanccaaatt cccacaatga caacaccaan tttaggtant ttccacatct ntttcaaatt      660
taanggcttt angcacacat attttaacac tggtanccac aagcngtgtt gcnccggaan      720
caanngntng agggaaacca ggtncaagga tggtnancan taagttgtta anggggttgg      780
gaananngn aatttttaa aacanattta cnttaanttt ccaagttttn ccnccgggga      840
anntttttng gccaccaatg ggggnncccc nttatanccn ngtnanccgg ggacattttt      900
tnnngggga atttnganaa atttagagtg ngaaangntt tttacccaan agtnccn          957
```

<210> 13
<211> 1020
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 13

```
gtgngtctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc       60
ttcgagcggc cgcccgggca ggtacccagg attcaaaagt catcttcccc ggcgggaggc      120
aagggacgct tatggagaac ctcttaaaga tattgtgagc attctactca ttacttaggg      180
aaagagagcg ggtgttggtc caactctggc ttttgtgcca ggtaggagtt ggtcctgagg      240
ccgcccatct gaccatactg gacctgtttt aaggtttttc tctaaaaaaa ttttagattt      300
gtcaatctgt gctcctgcag ggatgctat gtccaaatgt cccaggattt gttttttct        360
gtctttcctg agacattccc tgcccagcta cccaaggaat ccttcaaacg agcaaatctg      420
accatatctt ctatggtcag attaaaatct tccatggctc cctattgctt atgggacaaa      480
atcaaaattc ctgagtctgg tctaaaaggt gtttgatgat cttgacctgc tgactttgcc      540
agccttcttg tcagactctc gtgtcatgct ccgcctagac tatgagcctg ctatttcata      600
ctatgtagct ttgtaaagtc ccagaaaatg ctgggctctg actcttttat aactttacat      660
atactgttcc atctgcctgg aatgccttct acttgtctgt ccagcaaatt ctcaactcat      720
ctcttaaggg cccagcttca attgccgcct cctancataa gtcttccctt gatttcccan      780
gcagnaatta nntcccgcgt accccgggga ntcccaatca gtttgtgctt tcaaaactga      840
tggnnngact tccctgaaat ttgggttacc ncaaaacgaa atgggtgaat ccnnttcccc      900
cggggggct gcaattgcac cctttttaa aggggaaccc tgnaantccc aatggnttaa        960
atttgacncc cttaanggcn tnanttcnat tgagcaactt naaaaggggt ttttttttt      1020
```

<210> 14
<211> 1013
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1013)
<223> n = A,T,C or G

<400> 14

```
gtgtcgatgc atgctcgagc ggccgccagt gtgatggata tctgcagaat tcgccctttc       60
gagcggccgc ccgggcaggt acctcattag taattgtttt gttgtttcat tttttcnaa       120
ngtctcccct ctacnagctc acctgagata acagaatgaa aatggaagga cagccagatt      180
tctcctttgc tctcngctca ttctctctga ancctaggtt acccattttg gggacccatt      240
ataggcaata aacacagttc ccaaagcatt tggacagttt cttgttgtgt tttanaangg      300
ttttcctttt tctnancctt ttcctgcaaa aggctcactc agtcccttgc ttgctcantg      360
gactgggctc cccagggcct aggctgcctt cttttccatg tcccacccat gagccctcna      420
ctagacagct cantaagcct ggcccttcat tctgcgctgt gttcttcctc ngtgaaaatc      480
caatacctct tacctcctct gcatgcaaag attctcaagg attgtcagac ttcaaacgta      540
acagcagaac caccagaagg tccnataaat gcagtagtga ccttctcaag ctgtcaggtc      600
tttaaatagg atttgggatt taatgcnatg tatttttaaa ggaaagaaat aagagttgcn      660
```

agtttaaaaa tgcatgtctt ttagccaatt cagaatcctg cccccaaact tttttaaaaa 720
gtcaagacag ataaagcttt gggggganacg gaaaaaaann gnnnaaaaaa anaaagtact 780
tcgggcggna acnacgctaa gggnnaattc agcananggg gggccgttac aagngggttc 840
nannccccggt acnaanccctt gggggtttaa caagggcnaa ancnggttnc cggggntnaa 900
aattgttacc cgcnaaaaat tccanaaaaa natncgaacc cggaaancca taaanttntn 960
aancccnggn ggccnaaggg agngnnnaac cccnaataaa tggnttggnc cnt 1013

<210> 15
<211> 951
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(951)
<223> n = A,T,C or G

<400> 15
accctagggc aaatactgag cagggtaaaa ttcccagaat acccactaga agcgtggaat 60
atatcaatat cctaggaaga agattcagca caccaaattt cccattactg ataacagctc 120
tgaaggcata ataagaaagt gagtgatcag aagagcagag aaatgacttg ttccagtcac 180
tgccatcttg tttacccttt cagtggttcc cttacccttt tccccactgg gcatacagct 240
catctctctc tgagtccttt tctgctttcc tcctttgctc taaacgttcg agtttcaaat 300
tcctcttacg accagactta tctcgaaata cggtttcagc atattgaaat tcagctgcaa 360
aggaaaatta tactcaaata tcaggatcaa aatcagaaat aacattctaa gagatcaaat 420
caaccgcttg ggattctaat gctagataag aacttctgca gccagaccaa agtagttcct 480
accaacatct tggtgcatat tggcactggg cccaagaaat ggcattttcc tttttttttt 540
ttttgagatg gagtctcact ctgttgccca ggttggagtg cantgggcgc gattttggct 600
cactgcaacc tccacctccc aaggttcaag cgattctcct gtctcaagcc tcctgagtna 660
gctggggaat acagggcata cnacancatg cctggctagt tttttttttg gaattttggn 720
tagagacagg ggtttcatca nggttngccc aggcctggtn cttggaactn anagaccctc 780
aggntggatt caacccaact tccgggctac caaaaggtng ncgngggatt acangcattt 840
anncaacngn gccctngggc naaaatggna anttttcang aagggaaagc agcnntgggg 900
atcccnggnn naantttcac caaggcctta aaccagggnc gtaaatttgt t 951

<210> 16
<211> 1008
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1008)
<223> n = A,T,C or G

<400> 16
gtgcgatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta cattacttgg tgttaacatt gttggcagtg gtagcccctt 120
ttcagaaagc aacttgctgt aagtcagggt gtccgttcca accttcagct agtgaaaagg 180
tagtaacaaa tggtaaacaa gagaatgatt gtttaaacct atctgtggac acttaatgca 240
actgtttaaa aatgataatc acgagttatg tagcaacgtg gaaatatatt tacagaacat 300
taagtggaga aagcaggaca cgaaagtata tttatactac agttataact caacagttca 360
tttatatgct gttcatttaa cagttcattt aaacagttca ttataactgt ttaaaaatat 420
atatgcttat agtcaaaagc tgttgtggtg ttgttgttgt aggcttatag ttgagcatta 480
ttttcttaaa tttcttgaat gttctttatg gtagtgttac taaaaagttt atgatcacat 540
tttcattgtg aacataattt gaactcatta tcacacactt ggaaaataca gaaaagtgga 600
ggaaaaaaaa tcatatcccc ancatccaaa gacatatact ctcctcttat cctgttcaat 660
cctggtttcc ggtgcacaag gtttatgatt ataactgtgt caaaatgtat aatcaaaata 720
gctgttacat taccttggtg gnantaaggg taaatacctt caccttaaat ttttcaaaan 780
gttcccaana ataaaggtcc ggataacagt ggtataagtg tgtcccaatt gggggtgcan 840
aatacattcc cangngggaa aatttnnaaa tnaagttaaa ttattttaaa aaatttccaa 900
aattcccaan anctaanaac taangggnaa aaacctngat cgggntnccc caaacnngtt 960

taantgnnac nccttgggaa aanaagnttt aaaaanggtg gcaaaaag 1008

<210> 17
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 17
gtgnctctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc 60
tttnnanagg ncgcncgggc angnantctt cccncctntg ccatnannca cggnnanaan 120
cngcagtggc actaantntg agacaatctt ncaaaccagc ttcatgtcgc tncacttntc 180
nnngtncaag angagggcca ggangggaaa catcacanct gcgctaagnc cngntccggg 240
nngtcagcat nngntctgtt ncaanncccn cgntcggtcc cctcatccta ctctgcctcc 300
natgactttg cncctcagac ntcntggaac naaggnttcc ngggggcac accgcgtccg 360
gccgnnnntg tctcggggcc acttggcgtg tgtgataaat caatcaagct gttnanntcg 420
nacgagtctc nggtngcctg canannntaag cctcatcatc agagcctttc ctcaaaactg 480
gantcccana tgtcatcagg ttntggttnt tttcagccan naggaagccc tcngcattga 540
atccnagaac ttgggcatgg tnnaagatct acaagntnga atacgctgcc cgcnanaanc 600
nttcaaccct aacaggaagg tnggattcaa ggaaggtgta anggnncatt annccacncg 660
ggggnaccaa gggagntana antanncatn nntttgggtt cgcccnccga agggnnttaa 720
cccccggaat tnnntttnng ntnaaggggg gnnnngggna aatcccngtt cnncatttgg 780
gaaagggann ccttnccttn cnntnggcct ntaaaagnnt tancaanacc cgnnatnntg 840
ttnanggccc cgntttttcaa nggggttaan nnnttngggn aaccccccnnc cccaaagnng 900
gnnnaanggg ggnaattccc aanaaaacng gggggnncct tnnnnnangg gnttcngnnn 960
ccccnaaagg nnncntgggg ggnnannann gnncnaaaaa gggttcccnn nnnnaaattt 1020
tttc 1024

<210> 18
<211> 981
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(981)
<223> n = A,T,C or G

<400> 18
acgcgggaca gagagaaggt taagagcaac aagatgggag gcagctgcat ggaacctgtc 60
ccactgagga agtaaaacag agttttactc ttgttgccca ggctggagcg caatggtgcg 120
atctcggctc accgcaatct ctgcctcctg agttcaagcg aggagcaacc ctacctgatg 180
gactggactt ctgcctggat tggagtttga tcatgcctcc atatgggtgt ttaccaggcg 240
tatgcattga acctgagttt gtctcttcaa tacaaggaaa atctctgccg cttagtgatt 300
ttccaagaaa catgagcttc tgcctttcaa tgaggaagat actcagaagt catgttcgag 360
cactccggaa aatgtccttg gagtttcaac atttctttgg tcttccacat ttcattttgt 420
cctgattaaa gaggaagcca agttgctgtt tgtgtggcca tgtgagcagg canggagatg 480
gtggctgcct agaagccaag agaagtggcc tcaagatgaa atctaccttg ctggtactgc 540
ccggggcggc cgcccgggca aggtacnttt tttttttttt gtttttttttt ggcaaaaagg 600
ctgtaaagct tttttgggga gaaattttaa tgggncaaan tttccaacac aggnagcanc 660
cctgaaacca attttaagcg ggtccttccc ttttaaggct gtnnaattgc cccttcaanc 720
ttcctcaagg ngtttttcac cctcccnccg ggattttggn aaaggcccaa aantccntgg 780
gnnaanaagg gacaatctcc cgggnttaaa aaccaattnt ncggggngna accnggttcc 840
ctgggctann cncctttaan ggntnccggg gcccttttgn gggggnaatt ttcaaacggn 900
ncctncattt tctnaggggg naancсncct tngggtcann gggncnannn cccaagnctt 960
caaanccnaa ntcttttggg g 981

<210> 19

<211> 980
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(980)
<223> n = A,T,C or G

<400> 19
```
actttttctt tttttttttt tttttccgtc tccccaaagc tttatctgtc ttgacttttt      60
aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta aaactagcaa     120
ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat ttaaagacct     180
gacagcttga gaaggtcact actgcattta taggaccttc tggtggttct gctgttacgt     240
ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg tattggattt     300
tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg tccagtggag     360
ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc cagtccactg     420
agcaagcaag ggactgagtg aagccttttg caggaaaagg ctaagaaaaa ggaaaaccat     480
tctaaaacac aacaagaaac tgtccaaatg ctttgggaac tgtgtttaat gcctataatg     540
ggtccccaaa atggggtaac ctagacttca gagagaatga gcanaganca nagggagaaa     600
tctggctgtc cttccaattt tcaatccgtn atcccaggtg aagctgggta ngagggggag     660
ancattngna naaaaatnga aacaacanaa nccagtttac taaatnaagg gaacctgccc     720
cngggcgggc cnccaanggg ccaaatttca ancaacanng ggcgggcccg ttaccaantg     780
gnattccgaa gccncgggta accaangcct nggngtnaat ccagngggnc aaanccngtt     840
tnccnggngt gnaaattggt tancccgccc naanaattcc acancaacga atcngaagnc     900
cgggcnagca tnnangnnta aancccgngg ggggcncaaa agggaatgnn nccanacccn     960
attaaatncg gttgcccctg                                                 980
```

<210> 20
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 20
```
cttggtaccg ngctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcca      60
tcctaatacg actcactata gggctcgagc ggccgccggg caggtattca gcggccgctt     120
tttttttttt tttttttttt tttttttttt attgntgaca ctattacaga tagaatgacc     180
acaaccatat taacaaacca aaaacctgtg cacagaaaca agatgaagaa aatatatcaa     240
gatgttaacc acactntttg gatggtgaaa acatgggtga gtttctcttc tacatttctg     300
taacttcaaa gtttctataa tgaacacatt tcatatataa tggaaatata tgtagtaaag     360
gnggactacc aaaacactag aatgatgacc tttcaaggaa accgaaacaa aataaccata     420
atcccacaac aaccacacaa ctatttcttg gttttcatct ttcttcccat ctttgacatt     480
tatgcatact tatcactaac accctaataa tcacagacta gtgcacagat caagatgtta     540
acagttaatt gttgttgggt gttgggaata tgtgtgaatt ttctttactg aatttccaaa     600
gttttgtatg agtatgtatt atatttgtaa tggaaaatac atacataaaa tttattacca     660
aaacaccaaa gattatttaa ggaatttgag acaaaatatt taaccaaatt cccacaatga     720
caacactatt ttaggtattt tccacatctt ttcatttaag actttatgcn cncatattta     780
acactggtat ccacaagcgt gtgccctgaa accaggatan nggggaaacn ngatcaagat     840
gttagccagt agtttggtag gnggttggga aatataggga atttttctnaa aaaaatttac     900
tttatttncn aaattttccc cttgggnaag ggattatggc ncnccaangg gngccccctt     960
aaanacnctg gttttcngga cctttttttt nggggaccat ttggaaaaaa ttaangggga    1020
aggt                                                                 1024
```

<210> 21
<211> 1024
<212> DNA
<213> Homo Sapien

```
<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 21
nagnngcang cncgagcgcg cgccagtgtg atggatatct gcngaattcg cccttcntan      60
cngnngncac tnaatgcang ngcnnaacca tgataacccg agttatgctn agcanaggaa     120
ctatatgtac agaaacatta agtgnngaaa gccnnacncn anggnanntg aatactacng     180
tnataactna ncagaccatt nanatgctgc acatttaaca nnncntncan acagnanatt     240
ataanngnnt ananntatat atgctnatng accaaagctg tngaggggtn gccgttgaag     300
gcnnnnngnt nagcattanc atnttacnnc acttgcctgn cctntatggc agggttacta     360
tctttgttac tgatcacgac atcantgcga acntaanacn aacncnntat nacacactng     420
nnanagcccg aatcgngnng gaacagtatc ntntcnccnc canccnnaga catntncnnn     480
cctcttatcn tgancattcn agnttctgtg cacaggtnta tgatnntanc ngtgncaaan     540
tgnntcttna aantanttgc cacatnacct tngaggantt atggannaan actctcactt     600
taaanccnnc aancgacccc nanaanactg tnctgntaac agtgcanaat gtgtgatttc     660
atagttntgc acacacatnc ccacnggaan cacaggcgtg tgcactgaac attntagagg     720
ntacctatct gccgacacct aacactacng gtnacggcaa gatcggaacc tntaannggg     780
ttaacncaaa cnctagggat acccngggaa atatgtggcc caccgtttaa acccccgaag     840
tgcccngtac ccnggacatt gttttcgtgn cggtanttgg gttaaanntg ggntnaaaac     900
cctaattccc cctgggggtt tgccactaaa tttgaaggac cttttggccc tgccaaaatc     960
annaaccctg gcncanaact ttgggggganc nggnnaggna gggtnnccct tttttttccga   1020
aggc                                                                  1024

<210> 22
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 22
gtgcgatgca tgcncgagcg gccgccagtg tgatggatat ctgcagaatt cgcccttttcg     60
agcggccgcc cgggcaggta cttttttttt tttttttttt ttttttttag attccacata    120
tgagtaaaat catgtggtat ttgacttgcc ttttaaaaca cagtgaagaa tctgtcttac    180
tttattcagg gtaggagaag ctacctgggc tccccataaa tgaggtgctc catcccatca    240
tacagcccca tcatattcag tgcttcccag atgacctcct caggggtgca gtagccctct    300
atgaagatta tgcttaggat aagtatgaga atgccagtct tgggcatgct ctggacatca    360
ctcagcatcc catcataggt gaggcccagg gaggtgacaa ggacaaagga gtggccagtg    420
ggatccactt cctttacatc aatgccaaag accagcagca tgcactcgga ggcttcacta    480
aacaacaaag ggaagtggtc ttcataattt tttatgacac tctccaagta tttctgcctt    540
tgtgatcggc tccttcattt gatacttgaa gagcagaaac tgcaccaaat cagtcacctt    600
ttcatctatc tcacttctgg gtaaagactc actgtctggc aaggacctgg tagggtgctt    660
gggactcccc tcctttggc tgcnggagnc ctcancagat tgatctaatg gaagggaaac     720
aacgacccna ggggaaggag cagggctatc tngagcaacn ctggggaagg atttggggtc    780
nccatcatca ngcagnaaac tccctcccgg gggtnccttg ggnanttaaa gggatnccca    840
ggaaggagga nggagggaan agggaggang agggaaaaac naggntngga aaaagggacn    900
cggngggaaa ttggggntta tacaccgccn ncnnnaannn ggggngagnc ngnngnccng    960
tcgngggncnn gnttccnntt gggngaagnn ggnttctcnn angggncgnn nnnnnnnnnc  1020
cnnt                                                                  1024

<210> 23
<211> 948
<212> DNA
<213> Homo Sapien

<220>
```

<221> misc_feature
<222> (1)...(948)
<223> n = A,T,C or G

<400> 23
```
acttttttct tttttttttt tttttccgtc tccccaaagc tttatctgtc ttgacttttt      60
aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta aaactagcaa     120
ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat ttaaagacct     180
gacagcttga gaaggtcact actgcattta taggaccttc tggtggttct gctgttacgt     240
ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg tattggattt     300
tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg tccagtggag     360
ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc cagtccactg     420
agcaagcaag ggactgagtg agccttttgc aggaaaaggc taagaaaaag gaaaaccatt     480
ctaaaacaca acaagaaact gtccaaatgc tttgggaact gtgtttattg cctataatgg     540
gtccccaaaa tgggtaacct agacttcaga gagaatgagc agagnagcaa aggagaaatc     600
tgggctgtcc ttccattttc attccgttaa cctcaaggtg anctggtaaa aggggagaca     660
ttagaaaaaa aatgaancaa caaancaatt actaatgang tacctgcccg gggcggccgc     720
aaagggcgaa ntccaagcac acngggcggg ccgttacaan tnggatttcg aacccggtac     780
caaancntgg gngtaaanca ngggncaana accggnttcc cgggggtgaa aantgtttat     840
ccgcccaaaa attccaaaaa ancaatanga aaccggaaan cataaagtnt taaaccctgg     900
gggggcccca aangantgag ccaaanccca attnaattgg gttggncc                  948
```

<210> 24
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 24
```
taccgccctc gcatccctag taacggccnc cagtgtgctg gaattcgccc ttcctatctg      60
tggacactta atgcaactgt ttaaaaatga taatcacgag ttatgtagca acgtggaaat     120
atatttacag aacattaagt ggagaaagca ggacacgaaa gtatatttat actacagtta     180
taactcaaca gttcatttat atgctgttca tttaacagtt catttaaaca gttcattata     240
actgtttaaa aatatatatg cttatagtca aaagctgttg tggtgttgtt gttgtaggct     300
tatagttgag cattattttc ttaaatttct tgaatgttcc ttatggtagt gttactaaaa     360
agtttatgat cacattttca ttgtgaacat aatttgaact cattatcaca cacttggaaa     420
atacagaaaa gtggaggaaa aaaaatcata tccccaccat ccaaagacat atactctcct     480
cttatcttgt tcattcttgt ttctgtgcac aggtttatga ttataactgt gtcaaaatgt     540
atattcaaaa tagctgttac attacctttg tggaattatg gttaaatact ttcactttaa     600
ttttttcaaa tgttccctat aataatgtcc tgataacagt gtattatgtg tgtctccatt     660
ggtgtgcata atacataccc agaggaaaaa ttagaaaata aagtaaatta ttttaaaaaa     720
ttacctatat tcccaacacc taacaactac tgnttaacca tcttgatctg nttcctctat     780
cttggttcag tgcacacgct ttgngaataa cagtggttaa atatgtgtgc cataaaggcc     840
ttaaatggaa aagatgtggg aaaaataact taanaataag ggtggccttt gggggaaat      900
ttggttaaaa aattttgggc tcnaaaattc cnttaanaaa acctttgggg ggtttgggna     960
ataaaaatnt taanggangg aatnttcccn ttccantttt nattccttcc tcttcccaaa    1020
actt                                                                 1024
```

<210> 25
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 25
gccgtcnaga cncatgcncn agcgnncgnc ngtgtgatgg atatntgcng aattcgncct 60
tccatcctaa tacgactcac tatagggctn nagngngcca ctattncnga tngaangacc 120
acngccatat taacaaacca aaaacctgtg cacagaaaca agatgaagaa aatatatcaa 180
gatgttaacc acactctttg gatggtgaaa acatgggtga gtttctcttc tacatttctg 240
taacttcaaa gnttctataa tgaacacatt tcatatataa tggaantata tgtagnaaag 300
gnggactacc aaaacactag aatgatgacc tttcaaggaa accgaaacaa aataaccata 360
atcccacaac aaccacacaa ctatttcttg gttntcatnt ttcttcccat ctttgacatt 420
tatgcatact tatcactaac accctaataa tccagactag tgcacagatc aagatgttaa 480
cagttaattg cngntgggtg ttgggaatgn gcgtgaattt tctttactga atttccaaag 540
ttttgtatga gnntgtatna natttgtaan ggaaaataca tacatnaaat ttattaccaa 600
aacaccaaag attatttaag gaatttgaga cnaaatattt aacccaaatt ccacaatgcc 660
aacactnttt taggnatttt ccacatcttt tcntttaaga ctttatgcnc cccataatgt 720
aacactggta tcacaaagcg tgtgcactga aaccagggat nnagggaacc gancaagatg 780
ttnncagnag ttggtangng gatnggaaaa taggnaattt ttaaannaat tnacttttat 840
ttccnanatn tccctttggg gatgncttat gcnccccat gggggncccc ctttanancc 900
ctggtaatca nggccntttt ttttggggaa cttttggaaa aaanttnaag gggaangttt 960
ttacccataa tttccccaaa ggnangggn acncnttttt ggaanatcct ttnggcncct 1020
tttn 1024

<210> 26
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 26
gtgcgatgca tgcncgagcg gccgccagtg tgatggatat ctgcagaatt cgcccttt cg 60
agcggccgcc cgggcaggta cttttttttt tttttttttt tttttttag attccacata 120
tgagtaaaat catgtggtat ttgacttgcc ttttaaaaca cagtgaagaa tctgtcttac 180
tttattcagg gtaggagaag ctacctgggc tccccataaa tgaggtgctc catcccatca 240
tacagcccca tcatattcag tgcttcccag atgacctcct caggggtgca gtagccctct 300
atgaagatta tgcttaggat aagtatgaga atgccagtct tgggcatgct ctggacatca 360
ctcagcatcc catcataggt gaggcccagg gaggtgacaa ggacaaagga gtggccagtg 420
ggatccactt cctttacatc aatgccaaag accagcagca tgcactcgga ggcttcacta 480
aacaacaaag ggaagtggtc ttcataattt tttatgacac tctccagtat ttctgccttt 540
gtgatcggct ccttcatttg atacttgaag agcagaaact gcaccaaatc agtcaccttt 600
tcatctatct cacttctggg gtaaagactc actgtctggc aggacctgta gggtgcttgg 660
gactctcctc cttttggctg ctggagccct caacaagatt gatctaatgg gaagggaaac 720
caaccnaccg aanggggang gagcaggctn ttctgaagca ctctgggggga aggattttgg 780
ngtncncnat catncagcan gnaaacctcc cnccgggggt gccttggnna ttananggtt 840
agcaaggang gaggacgnag gaananggan gnangnaggg aaaaagangg attggaaaan 900
aggganccctn ggtgggaaat tggggttttn nagcaatccc ccnccaaaaa ncnaggggaa 960
ccctgttcaa cccncanggc cnggnttcca cttttggaat ttgaaanttt cctcaaggaa 1020
ngaa 1024

<210> 27
<211> 935
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(935)
<223> n = A,T,C or G

<400> 27
acgcggggtg gggggggtcc tggtctttgg cttctcgact cggtcctgtt tcgacagcga 60

acatgtcgcg gcctgtcaga aataggaagg ttgttgatta ctcacagttt caggaatctg 120
atgatgcaga tgaagattat ggaagagatt cgggccctcc cactaagaaa attcgatcat 180
ctcccсgaga agctaaaaat aagaggcgat ctggaaagaa ttcacaggaa gatagtgagg 240
actcagaaga caaagatgtg aagaccaaga aggatgattc tcactcagca gaggatagtg 300
aagatgaaaa agaagatcat aaaaatgtgc gccaacaacg gcaggcggca tctaaagcag 360
cttctaaaca gagagagatg ctcatggaag atgtgggcag tgaggaagaa caagaagagg 420
aggatgaggc accattccag gagaattccg gcagcgatga agatttccta atggaagatg 480
atgacgatag tgactatggc agttcgaaaa agaaaaacaa aaagatggtt aagaagtcca 540
aacctgaaag aaaagaaaag aaaatgccca aacccagact aaaggctaca gtgacgccaa 600
gtccagtgaa aggcaaangg aaaattnggt cgcccсacag cttcaaaggc atcaaanggg 660
aaagaatccn tctccaaaag aagaaagatg agggaaccgg aaaacccccc agaaaaggaa 720
aacatctana agccccccaa cccagaaatc tggggataaa ggggctgaaa aataaacccc 780
cntttgggga agntttaaaa ttatgaangg nctggggaaa aaattttttt aaaaaannnn 840
nnnnnnnnna aaaaaanttt cctgcccggg ggggcgccnc naaaggggga anttcaanaa 900
aaangggggc ggtttaaaaa ggggtttcca ccccn 935

<210> 28
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 28
cttggnaccg ccctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcct 60
atctgtggac acttaatgca actgtttaaa aatgataatc acgagttatg tagcaacgtg 120
gaaatatatt tacagaacat taagtggaga aagcaggaca cgaaagtata tttatactac 180
agttataact caacagttca tttatatgct gttcatttaa cagttcattt aaacagttca 240
ttataactgt ttaaaaatat atatgcttat agtcaaaagc tgttgtggtg ttgttgttgt 300
aggcttatag ttgagcatta ttttcttaaa tttcttgaat gttctttatg gtagtgttac 360
taaaaagttt atgatcacat tttcattgtg aacataattt gaactcatta tcacacactt 420
ggaaaataca gaaaagtgga gaaaaaaaaa tcatatcccc accatccaaa gacatatact 480
ctcctcttat cttgttcatt cttgnttctg tgcacaggtt tatgattata actgtgtcaa 540
aatgtatatt caaaatagct gttacattac ctttgtggaa ttatggttaa atactttcac 600
tttaattttt tcaaatgttc cctataataa tgtcctgata acagtgtatt atgtgtgtct 660
ccattggtgt gcataataca tacccagagg aaaaattaga aaataaagta aattatttta 720
aaaaattacc tatattcccc aacacctaac aactactgnt aacatcttga nctggttcct 780
ctatcttggt tcaagtgcac accgcttgng aataacaagg gttaaaaatg ngngccataa 840
aggtcntaaa atggaaaagg atgtgggaaa aatnacctaa aaataggggt ggccattggg 900
gggnaatttg ggttaaaaaa tttgggctcn aaaatncctt aaaaaaaanc ctttgggggt 960
tttgggaaaa aaaaatttta ggggagggaa ttttccattt ccaaatntta ntccntactc 1020
ntta 1024

<210> 29
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 29
taggatncat gctcgagcgg ccgncagtgt gatggatatc tgcnagaata cgcccttcca 60
tcctaatacg actcactata gggctcgagc ggtcgcccag gcaggtgcta acaaaccaaa 120
aacctgtgca cagaaacang atgaagaaaa tatatcaaga tgtaaancac actctttggn 180
tggtgaaaac atgggtgagt ttctcttcta cntttctgcn antncanagn ttctataatg 240
aacacatttc atatgtaatg ganntntntg tagtgnaagg tggactaccg gaacactaga 300

```
atgatgacct ttcaaggaaa ccgaancaaa ntnaccntan tcccacaana accacannac     360
tattncntgg tnntnatgtt tcttcccatc tttgacattg atgcntactt aggactancg     420
ccctaataat cccagacttn ggcacagatc aaganggtaa cnggtgattg gaggtgggtn     480
gccggaantt ggggtgantg ttntttatgg anttnccann ttttggtang ngattgnnna     540
aaattngaan nggaaacnct tacttnaant tgnttaccnn aacnccnagg atnttttaag     600
gattnggggc cnaaattttt acccaaattc cnncaangcc ancnctgtnt aagtcatttt     660
caaanttttt tcncttaaag accttaaggc cccctaaggt aacctgggaa tanaaggggg     720
ggcacntggn accaggntcc nagggaacng nnccaagant tttccccntt ntttgtttgg     780
gggttgggaa atnnnngnaa attttttaaa ggtaatncac ttaatttgcc aaaggaattc     840
ccttnggggg nggnnttatt gcncacccat gggagacccc cntaaggccc cnggaataag     900
ggcctttttt tttngggacc atttgggaaa aatttaaang ggaaggcnnt ttgnacccctt     960
aatttcccca aggnaaangg aaccnccent tttgganatt gcattttngg ccccgttttt    1020
aagg                                                                1024
```

<210> 30
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 30

```
gtgcgctcta gatgcatgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc      60
ctttcgagcg gccgcccggg caggtacttt aattttgctt gttcaaatga tctacactta     120
cattttgcaa atcttttttt ttaaattttt taaattttat attttttttc cagccaactc     180
aaggccaaaa aaaatttctt aatatagtta ttatgcgagg ggagggggaag caaaggagca   240
caggtagtcc acagaataag acacaagaaa cctcaagctg tgaggtcaat ttgtaattaa     300
aagaatacta agattagatg aacacaacac tcagaaatac tctaggagag ctgaaaaaga     360
aggaacagat gttaacaaaa caaattaagg ctgctgggga acctgagtcc atgttaagct     420
tgggttgact gtaaagaatt tttttttttt taatgcaagt tagacatgga gttagagggt     480
cagataaata acgaagagaa ttaagttagc gatagaaaga tctaaggata ctagctcctg     540
ggcacctagg gtgcaaactg acttgtggca gcataagctg atgctgcaca ggggacccaa     600
gccatgttgc tacttgtcac ttaaggcang aagcgcacaa aggaagtgat gaaagggtat     660
tagcctgcaa cattatttac agcatganag cctctcctac gggtcccaac cttcattagg     720
cactactggt gattcaagtg aatgggttgt aacccantcc ttaaaaggca aaggatgtta     780
gganttaca gggaaaaaag cttccggggt tttancaatt caccaatcan caaaccacat      840
attgaagttt ggttaaaaaa aaaaananna anaaaaaagt nccctcggcc gngaaacanc     900
cctaaggggg naaattccag canactgggn gggccgntta caaaggggtt cgaaccncgg     960
taccaaacct tgggggttaa ncaaggggca aaancgggtt ncccgnnggg aaaattgttt    1020
nccg                                                                1024
```

<210> 31
<211> 1019
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1019)
<223> n = A,T,C or G

<400> 31

```
gtgngatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg      60
agcggccgcc cgggcaggta ccatgctgac ttcttggtat cttttaaggc ctaattttcc     120
cttccttgag attactgtag tgtgttccag ctaatttcta tttggaaacg agttggaaca     180
gctgaaaact aggtattatt gaaggcaaag cagcctcacg tcagtttttt atcagctcat     240
ttgggaagtt tttttttttt ttttttttta attaattaga aagtaggctg ggcacggtgg     300
ctcatgccta taatcccagc acttggggag gccgaggatc tcctctctgg tggatcactt     360
gagggcagga gttaagagac catcctggcc aacatgatga aaccctgtct ctactaaaaa     420
```

```
tacaaaaagt agctgggcgt ggtggcatac tcttacaatc ccagctactt gggaggctga     480
ggcaggagaa tcacttgaac ctaggaagca gaggttgcag tgggccaaga tcacaccact     540
atactctagc ctgggcgaca gaggtgggga aaaaagtagg acccctgtcc tatattcagg     600
tttttctcac atatatgaac ccatctaaat tctacgttgt taaaggtanc ttaggttaat     660
taagtccata cttatttaag accaatatgg ggtgaaatgg gattttttt taaaaatcct      720
acagntnagg ctttccnact ttccttcnaa atgaggaaaa aaaggtgaca aaaattcaag     780
tgtcaatgtc ccctcctggg gaaanaggtt tanaaaaaca acaggctcaa ccttctgaac     840
tnctaacaan ttcccttnga aanttaacga anccattaaa atcnngattt taaaagagga     900
aaanaaaaaa gttcctcggn cggnnacaan cctaagggng aaattccaca aaaanngggg     960
ggcctttana aagnggttcc nacccggtac aaaaccttgg gnttaaccan gggccaant     1019
```

<210> 32
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 32

```
accgccctcg natccctagt aacggccgcc agtgtgctgg aattcgccct tgttgttggg      60
tgttgggaat atgtgtgaat tttctttact gaatttccaa agttttgtat gagtatgtat     120
tatatttgta atggaaaata catacataaa atttattacc aaaacaccaa agattattta     180
aggaatttga gacaaaatat ttaaccaaat tcccacaatg acaacactat tttagttatt     240
ttccacatct tttcatttaa gactttatgc acacatattt aacactgtta tcacaagcgt     300
gtgcactgaa acaagataga ggaaacagat caagatgtta gcagtagttg ttaggtgttg     360
ggaatatagg taattttttta aaataattta ctttattttc taatttttcc tctgggtatg    420
tattatgcac accaatggag acacacataa tacactgtta tcaggacatt attataggga     480
acatttgaaa aaattaaagt gaaagtattt aaccataatt ccacaaaggt aatgtaacag     540
ctattttgaa tatacatttt gacacagtta taatcataaa cctgtgcaca gaaacaagaa     600
tgaacaagat aagaggagag tatatgtctt tggatggtgg ggatatgatt tttttcctc      660
cacttttctg natttttccaa gtgtgtgata atgagttcaa attatgttca caatgaaaat    720
gtgatcatta aactttttag taacactacc aataaaggaa ccatttcaag aaaatttaag     780
gaaaaataat gctcaactat taagcctacc acaaccaaca cccacaacag cttttggact     840
attaagcnta tatattttta acnggtatta atggaactgg ttaaatgaac tggtaaaagg     900
aaccgcatnt taaatggact ggtgnggtta taaccggtgg tataaaaana cctttggggc     960
ctggtttttc ccttaanggt ctgnaaanat attttcncgt ngtccanacc ncgggatatc    1020
aatt                                                                 1024
```

<210> 33
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 33

```
gccntcnaga cncatgctcg agcggncgnc agngtgatgg atatnnngca gagnncgccc      60
ttccanccna atacgacnca ctatagggcn nncnnnntng gcnnctttgn tgcccctccn     120
ctcgnataat anctatatta acgaaattgt nctggccttg agttggctgg agagaaatat     180
tnngagnnnn accngtnnnn ntnngnnatc ngtaaantgt aanagtagnt catttgaaca     240
agcaatnatt naantaccca ctggnggaaa ngngnctgaa tcttactctt ntggatctgc     300
aggantaggg cttgtnagta tgtcaaanat gcnnncagtg tcaangttta ngccnattgt     360
aganctngta gcaggaancn acnntgangg ancnncagaa nggagncctn anacatnncc     420
agatntacga ggngagagga gacanacnga gaaagacacc ntaggnncga nctgnagaag     480
gncaggattc tgagaatgaa ntgcncggnn agtccnganc agattggaaa aggagnttct     540
ganggnatgg tgcacnngag ggctgacngg tangaggnac tgntgttgga acgnacatag     600
```

cgaaagntgn tgngcagtga ggattactac atgnngaaag gactcttgaa acgaggaact 660
aactgtgatg ncanggctga agtttgggcn nccatacttt gnaggttaca attnttngca 720
gtggncgncc cgtttaaana gccnttttga tggaaantca agggtgnncg gtacnacctt 780
ccntttaggg nacaaggcnt tnccgantgg gtngccagga agaanganng ccnnanccct 840
annnggnggg ccccttaatn gcacngggtg aacaatgcna accctcgggt tattggaacn 900
accgnggana anatggttac cgaaccatta ngtggggnna aacccggacc ccggaaggct 960
tttttnncct cngggtaaaa acttaacaga ccnatttttt gcccgccntt taacangtct 1020
tttt 1024

<210> 34
<211> 982
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(982)
<223> n = A,T,C or G

<400> 34
acaacaatct aagcaaatct caaatacaac atacttgtaa ttagaacaca atgcaatgac 60
ttgattttag caagaactag acacttaatt tggtaaaaga aaccaaacaa tgcattatat 120
tgaatactaa gctaagttac cataattagt cttacaaatt ctcaaatttc acaactactt 180
ttgaacatct aaatttaaac ctaaattttt taattaaatg cctgttcaac aaagctaatt 240
ggaacaaaca catttatgta aatttacatt ctagaatacc agggtaaaca aggagacgtt 300
attcaaagat gaatgagaaa gttctattct ttttcatcat ttgtgtgatc aggttgcaaa 360
ggacatgctc tttcctcgat gaaactgatg tcgaattagt ggcagaggtg gaagaaccaa 420
gcacctttct gggggctcga gcagccacca cttttctgta agtgcctggg aacactgtct 480
gctttagtcc gcaccatgtt caaacaagaa gagaggagag gagagaacga actgacttcc 540
cagccgaagg tgtttcactg ggacaaggcc ccgcgttacc tgcccggggc gggccgctcg 600
aaanggcgaa ttccaagcaa cactgggcgg gccgtttacn nagtgggatt cggngctcgg 660
gtancaaggc ttgggggtaa tcaaggggca atagccggtt ttcccngggg tgaaaaatgg 720
tnttccgngc acaantccca nacaancatt ccgaagccgg gaancntnaa agtgttaaaa 780
ncctgggggt ngcccaaatg angtggngct naactcccat ttaaattngc gnttgcgccc 840
nanngccng cctttccaat tncggggaaa cctgttncgt gccaagtcgg cantaaagaa 900
atcncggcna antccccggg gnaaagggcg ggnttgccgt nttgggggc gncttccggn 960
tttcccgggc caaagggann ng 982

<210> 35
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 35
cttggcccgc cctcggatcc ctagtaacgg ccgccagtgt gctggaattc gcccttccat 60
cctaatacga ctcactatag ggctcgagcg gccgcccggg caggtataaa atttaaaaaa 120
tttaaaaaaa aagatttgca aaatgtaagt gtagatcatt tgaacaagca aaattaaagt 180
acccactggg ggaaatgtgt ctgaatctta ctcttctgga tctgcaggat tagggcttgg 240
aagtatgtca aagatgcagg gagtgtcaaa gtttaggaag attgtagagc tgagagcaag 300
aagcagaaat gagtgagtca aagaagggag tcctaataca tcaccagatc taggagggga 360
gaggagacag acagaagaaa acaccagagg caagaactgt agaaggccag gtttctgaga 420
atgaattgag cggggtgtcc tgagcagttt ggaaaaggag tttttgatgg tatggtgtag 480
gtgagggctg gctgcatagg aaggactgag gttggagcgg acatcgggaa agctgagggg 540
cagtgaggtt tactacatgg gaaaaggact cttgaaacga gaatcagtgt tgatgtcagg 600
gtgaactttg tgggtacatt acttggtgtt aacattggtg gcagtggtaa gccccttttc 660
agaaagcaac ttgcttgtaa gtcanggtgt ccggtccaac ctttaactag tgaaaaggta 720
gtaaccaatg gtaaaccagg agaatgattg gttnaaccct atctgnggac acttaaatgc 780

```
cactggttta aaaatggnaa tcacgagttt tgtancaacc ggggnaatat atttaccgga     840
acctttantg ggnnaaagcc ggncnccnaa ggntttttat tncttcnggt tttaacctta     900
acaggtncaa tttataatgc cggccattt aacaggtcat ttttaacccg gtcnnttttt      960
acccnggtta aaaaannntnt atgcctttag gncaaaanct ttttnngggg gnttnttgtt   1020
nang                                                                 1024
```

<210> 36
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 36

```
taccgcctcg natccctagt aacggccgcc agtgtgctgg aattcgccct tccatcctaa      60
tacgactcac tatagggctc gagcggccgc ccggggcagg tagcaaatgt tgtggcattc     120
ctcctcctcc tcaagtcttt acccgaaact acttcccaag agaggttgct cttcccaaag     180
aatcacctgc cctgggacca tatggggcta ggctgagggt caggagccaa gagcctggtc     240
ccaactctgt ctgtggctta ctgtgagacc ctaggcaagt tgcttaccct ctctggggct     300
caaattcttc ctctttgaaa taggaataat aacttcatca ctagaattct tcacctggtt     360
gttgtgaagt taatcagaat aaatgtggag ataatacatg aatgagcgta cagaatatta     420
tttggctgtt ctgtggcatc gatataggtc atgatagtga caatagtgtc tgtcattgta     480
ttccacacca cttcttccct cagctaaagc aggaaaagaa aggaggtaag tctctctgtg     540
tttttcttc ctttccccaa gcccactttg ttaccttcct tggttgctgg atgagaaatt      600
agtcagaggg tcagagagga cctcaacttc atatgcttta aatagagcat atgcaatttt     660
aaaccatcct cttaaccaat ttttcttttc ttttcagttt ttccccagtt atacttccac     720
atgatacacc agagaaggaa gatcctttct catactgaag aacacaagaa atttgaatag     780
ttcctgcttt ctgnaccttc caccaaaaca aacttttcaa tgatccaaaa aactggcttt     840
gnactgggga gtcacggaat gggccggctt ccangganca tggcggnngg gcctttgcgg     900
ngtcgggcct gtggtggcgg cggaaaggna accgggggca tggnttnccg agcctggtct     960
tgccccccng ggncatggtg tggaggcaaa gaancctgaa gtccccacng gcccccggga    1020
agna                                                                 1024
```

<210> 37
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 37

```
cttggcaccg cnctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcca      60
tcctaatacg actcactata gggctcgagc ggccgcccgg gcaggtgaat tcagcggccg     120
cttttttttt tttttttttt tttttttttt acagggcggc tttttgtttt atttctgctt     180
ttttcccttt ttcttaaaaa aattaaataa agttctcatt atttccccaa tatacatcaa     240
atgagttttc atgcaaagca gcagtcacag aggcagaact gtccccagct cgtgcctntc     300
ggcttgaaga accaccttnt cccggccccg ggttctctgg ngttctcact gaggatggac     360
gacgcccact gtctntccca gctggaactg gctatgacga aacttggctg gcgtagggag     420
aggagtcctc ccctntcccc aggatggggt ctcaggggac agcaagctct ggggcctgat     480
ccccatcact tgnccttcca tctgagactc ccagtgtgac agcttggaca ggtccctctt     540
cccaggaatg cgaggctcct cctctcagct ctcaatggac atggcattaa tgagctgctc     600
caccttataa gccagccgnt gccgccgtgc ctgctcatcc tgctctaggg ccccgatgag     660
ctcctcacta tacttgctga cataggagta gatctcattg gggcactca acatgttgaa      720
actccacggn gtgcaggcgg gactgctcgg cgagggtagg cattcatggc ctggtcactg     780
gatggctggg aaccttggcc aaggctgcgg nagnatcttt tccccccagc tnttggnaac     840
ttggggaagg cccttgggca taaaaagcaa cttggttgga anggggaggn ctttgcccaa     900
```

```
cccggggggct ttggacgttg gaacaagagt nccttgaagg gtttgggncc cccncaaaaa    960
ngcangcntc cgggaaagcc gcccttgggg gtgncaaaac cccnaactgg ggggttnttn    1020
aanc                                                                  1024
```

<210> 38
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 38

```
taccgccctc gcatccctag taacggccgc cagtgtgctg gaattcgccc ttccatccta      60
atacgactca ctatagggct cggcggccgc ccgggcaggt gccgcttttt tttttttttt     120
tttttttttt tttttgcttc acaactgttt attttaagct gaaacttcaa tattcattga     180
ttacctataa taatagttac tcataaatgt agttaataat taaatataaa aattattatt     240
tttacattta tataaatctc tgaaaaatac caagttttga gagatagagc aagaaattgc     300
ttanaaaatt gcaggaagcc tgaanaatct cagcatcagt caaagcaggt ncaacaaaaa     360
acaattttag acattcattt tttgctttaa gagtgcttaa aataaatgat cacagaatga     420
ataactgatg tatggcaaaa atgagtttaa aactatgtaa gctccaaggc cccaatgtgt     480
ataagaattc tttggaagga ttttgaagga ctgtaaatgt tgcaaataaa agtaaaaact     540
agtagttagg caatgngttt taaactatag ngtcacctac tgntcttctg gtgcctaact     600
gnattcttca acatcttctt ttccctttg attagaaatc ctggtctacc tcaaaggttt      660
tgcattgntt tctagggaca tcagcaaact ggtagaccat atgagaaaca gaaataaaca     720
gtaatattat ctttagaaat taagcattat gtacncagtg agaaatggat tgacttgata     780
gaccttaaac ccctttcttc ctttcacacc ctttntagna ccacctaang gtatccggat     840
tggggatggg gccccnctnt ggtaatcccc ctnnagtcag gacaggggcc cctaagggcc     900
caattttntt tcgaattaga gaaatncccc attttttggg gggttggcaa gtnttanccc     960
anggcttgca aaggcttntt tttgaagana cncccaaacc cggggncttn tttttcngga    1020
atca                                                                 1024
```

<210> 39
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 39

```
tcgcccgagc agnangcncn agcggncnnc agtgtgatgg ttatngtgnn gnnttcgcnc      60
tnccatncta atnctactca ctatagggnn cntgngncnc nnggcnagtn ntnacnnntn     120
annggtgtaa ctgatatcat ntcncnnana ccatggttac atnnanntag gtctcnnang     180
nataccangc tntgagagnt ngaccnggaa ntcgnttnga aannttgngc gangccngat     240
caatatccnc atcngncaca gcggntccgc aagctgacaa tnctgnanat tnattnttgg     300
tttanngganc nnttacangn atggnnnccn gagatgcatg nnggagtatg gcaaagatgn    360
ntgtaaaact atgtaagctc naaggcccca atgtgnataa cagttcntgg nanggantnt     420
ganggantgt aagngntnaa nntnaangnn anannnaaga ggtangncat gagcccnaaa     480
ctgtagnnnt anctacagng cttanggcgc ctacctggga caggcnacgn cttcattaac     540
cttttgatta gaannacggg ggtaacncac nggttnngca tggtccagta ggngcattgn     600
ccngcngggc aaccatatgc tgngcncaaa taaacggtgc ttttanctca nnagattaaa     660
gctttttggc cacaggggna aaagnatggc ttganaggcc ttaaaccccc gtactcngtn     720
cacccctttn gagaaccncc taacgggatc tggaaatgng atggcccccct nttgggaaac    780
nccctanaag anacctcngg ngacccccttg nggcccattt tgangtttag nacngcaatt   840
tncccatttt tgnggttttt gccaacccta agncatnggc tggcaatgga ntgnnttttc     900
caatagaanc aaaccccggn tntttttttgg ggggnatcag ggttaagggn nttggcaaaa   960
nnaaannggc ncnnggnaaa aatttttccc nggtntatcn aaanncccca aagcttttng    1020
```

caan 1024

<210> 40
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 40
nggacgcatg ctcgagcggc cgccagngng atggatntng tgcagaantc gccctttcat 60
gcctatgatc ccngcacttg gngaggccga ggatctcctc tctgggggat cacttgaggg 120
caggagttaa gagaccatcc tggccaccat gatgaaaccc tgtcnctact nnacatacag 180
gaagnagctg gncgngntgg catactctta caatcccagc tacttggnag gntgangcag 240
ganaatcact ngnacctang aagcagaggn tgcatntgnn ccaanancac accactatac 300
tntagcctgn acgacagagg tgntgataan agcnggaccc ctgactatat ncaggntttt 360
ctgacntnna nnancncatc taaatnctac gccgtntgag gtcgcntagg ttangtagnn 420
natnctnatt tatgaccaat atgntgtnan acggcntnnt gntnaaaant tntacagnan 480
ggcngnctac nttncttata atgnggaaaa cggtgnctga natncangtg nnnnngtccn 540
nttnntggna agaggnttng aaanncanca gtgcaccttn tgaactctac nagnagcttn 600
tgaagctaac naagcnttaa natnagatgg cntgntagga ctgtacnngc anggaaagat 660
tcacaaaact ggacattctt naccgagata ngntcttgct ttaccgggga ggacnnntcc 720
aaggntgtnt naagagggac agtcagctta gtnntgctng ggtagagaaa accangactt 780
natntgtgag cttgatnggc agaacctggn nanccttgga agagcntnga ttgnccngat 840
ccctgaaagg gcnnncttna ccctatcggg gaccttnnna acctcttang tggcacgcaa 900
ggcacnaacc nggcncnttt caagaatcnc nggaatcnag gccccttttct tgggntnanc 960
cngnnnnncc cgttnagncc cncgggnaaa anntcttggg nntttccaat cccngnggnn 1020
nttt 1024

<210> 41
<211> 1004
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1004)
<223> n = A,T,C or G

<400> 41
ggtnnnntta atcatcgccn gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgcccttag cggccgcccg ggcaggtact tcccaccact ggaaatgtta 120
gcataaaaga acttggagag gaaaaaagta ttaacaaaac tgcagtctgc actctttaaa 180
cctgtttaag gctcttcatc ctggttagca aaggtgtga atgtaatgtg atggaattta 240
aaagttttat gagaccaggc acagtggctc acgactgtaa ttccagcagt ttaggaagcc 300
gaagtgtgca gatcacctga ggtccggaga ccagcctggc caacatggtg aaaccctgtc 360
tctactagaa atacaaaaat tagccaggtg tggtggcggg cgcctgtaat cccaactact 420
caggaggctg aggctagaga atcacttgaa cccagcaggc ggaggttgcg gtgagtcgag 480
atcacgccat tgcactccag cctgtgcgac aagagcgaaa ctctgtctca aaaagatttt 540
ataagaaagc agagcttttc cttgaagctc ttttgaagtg gtagcttaat tagtattttg 600
ntgaaaatac tttaaagatg cctagtgaaa agcctactaa agtgctgtga aaaatggggt 660
ttanaacatt ttattttcan gctttatggc ctattttcca ttgnggcaag tgcaaaacta 720
ccctggccca aangaagggc agagaacata attacctctt anggcacatt tcattctttg 780
cagctttgct taatccagtn gctaagttct ttacctnaac cctgnaggna ttgaacntta 840
ttnccatttn ngnaaaaggg tcaccctntt nnnacaatnt tncannanct ttttnggaag 900
ttanccnttg gccttaaaan ttnaaaantc cntntggnnt tccctttatn ccccnnangg 960
gnnnantang gnntggattt ttaanggncc ttggccngaa cccc 1004

<210> 42

<211> 1020
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 42
```
nnnnnnnnnn nnnnngattg ggccctctag atgcatgctc gagcggccgc cagtgtgatg      60
gatatctgca gaattcgccc ttagcgtggt cgcggccgag gtacctttga taattcctag     120
acctctattt tcattctgtg tattaatgtg aataacagat ggatatttta atatttaagg     180
cagatggtaa actttcctat aggtcttgtg agacttcgtc ttataggctg aacaccattc     240
acaaaatgta ataatgcttc attccttcag gttgaggtaa agaacttgag caactggatt     300
agcaaagctg caaagaatga aatgtggcct aagatgtaat tatgttctct gcccttcctt     360
tgggccaggg tagttttgca cttgacacaa tggaaaatag gccataaagc ctgaaaataa     420
aatgttctaa accccaatct cacagcactt tagtaggctt ttcactaggc atctttaaag     480
tattttcaac aaaatactaa ttaagctacc acttcaaaag agcttcaagg aaaagctctg     540
ctttcttata aaatcttttt gagacagagt ttcgctcttg tcgcacaggc tggagtgcaa     600
tggcgtgatc tcgactcacc gcaacctccg cctgctgggt tcaagtgatt ctctagcctc     660
agccttctgg agtaagttng gaatacaggc gccccgncaa cacacctggc taaattttgn     720
atttctagta naanaccagg ttttnancat gttggncaag gctggtcttc cggaaccttn     780
angtgatctg gacacctttg gntttcctaa actgggtgga aattancagc gggaaccnct     840
ggggcctggc tcattaaacc tttaaaatnc cttnccattc anttcncacc ttttggtaac     900
cccgnatgaa aacccttnaa ccgggtttta agnangcnna nnngggnnat ttgtaaaact     960
ttttccccnt tccaagtcnt ttaagccaan nntttnccng gnnnngggan ccctnccggc    1020
```

<210> 43
<211> 1020
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 43
```
ggagnnnntt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttactgctt tgtcttcaag     120
gcctagtgta ataattaaca tctagtatgt gtttgatgga tagccaattt ttgcttcatt     180
ggtatgttgt taccacagtc attggtagag tcaatatatg aatgaagaaa gtataacaaa     240
tttgccctct agtagagtac tttttttttt tttttttttt ttttgttttt tttttttttt     300
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt     360
tttttttttt ngnnnttttn ncntttttttn aannaaaaan cggcccnann accnnccnnc    420
nnnttttttt nncnggccnn ccnggnttng gggnnggggnn cnttnngggc cnnnnggncn    480
cttttttccn naagggtttt ggggttttng gggnaaantt tnggnncnan nnnggcccna     540
aaaaanttnn gnccnanaan cgcnntttcc nannnnttnn cnttggggcc caaaaanttn     600
cgnaaccccn tgggcnnaaa gggcnttgnt tttttttgggg nncccnaaac canggggggg    660
cnnaaaaaat gnccccttgaa ntttttaaaa aaccctntgg naaaanccccc nngggttccc   720
ccnnnnnccc ttanttttnn acanaanggn nnaaanggggg ncccnnnaaa naccnttngg    780
ggccnttttt tnacaaattt ggggntttnn aaaggggttt tnnggggggc cctntatncc     840
ccnaaaaang aaagggnnnc ccccccnnn nnnnnnnncc cnaanccccc ggnnnttttn     900
ccngggggggg cccnnnaaaa gggggnaant ttnggnaaan nccnnnnncn gggggggnccn   960
ttnaaanntc nntttnanng gggcccnnnn nnccccnnnn annggggggn nnaaaaaccn    1020
```

<210> 44
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 44
nnngnnnnnn nngattgggc cctctagatg catgctcgag cggccgccag tgtgatggat 60
atctgcagaa ttcgcccttt cgagcggccg cccgggcagg tacgcggggc tcggcgctgc 120
ctacggaggt ggcagccatc tccttctcgg catcatggcc gccctcagac cccttgtgaa 180
gcccaagatc gtcaaaaaga gaaccaagaa gttcatccgg caccagtcag accgatatgt 240
caaaattaag cgtaactggc ggaaacccag aggcattgac aacagggttc gtagaagatt 300
caagggccag atcttgatgc ccaacattgg ttatggaagc aacaaaaaaa acaaagcaca 360
tgctgcccag tggcttccgg aagttcctgg tccacaacgt caaggagctg gaagtgctgc 420
tgatgtgcaa caaatcttac tgtgccgaga tcgctcacaa tgtttcctcc aagaaccgca 480
aagccatcgt ggaaagagct gcccaactgg ccatcagagt caccaacccc aatgccaggc 540
tgcgcagtga agaaaatgag taggcagctc atgtgcacgt ttctgttta aataaatgta 600
aaaactgcaa aaaaaaaann nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn nnnnnnnnnn nnnnnanna aancccnnnn aaaanannnn nnnnaaaaag 720
gcttntttta angggcaaat tgggaaacct ttttnattca aaaatggctt ttnccangga 780
ctggggacca nnttncccng gggnccaaaa ttgggntttc ctttaanccc nttncnnaan 840
gggaattttt ncccttgggc cttgaaaaac naagcnnnna aaaagnccct tgggnnggaa 900
acccctttng ggggaatttc cncnccnttg gggggcnnt ntnnnnnggg acccnanttg 960
gncccaantt ttggggaaaa nnngggnnaa aaagggnnnc cctgggggaa aatgttnccc 1020
ccca 1024

<210> 45
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 45
ggagnnnntn aatcatacgc cagcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacggcgca ttttgtgcac 120
acaaaatgtg cgcacacaca cacacacaca cacacagaca ctcctgcaca tggcctgtta 180
aagaactaca agggaggtgg gacgcgggaa agtgtatggt gtgggtttgc atcgtctcat 240
cattgattct tctcatattt ttctctgatt agagaaacta aagagaattt tgtgagaaag 300
gcttgaaagt taatgagtta cttctaccaa agtgattaca agcagaaatc ctcagatgct 360
gtagagatgc tgacccacac atccttagct caaggaagcc cctcgcatta gtcaccttca 420
gccatcagca gcctccacca ttaaccccag tgtgctgtat aaaaaatact ttctacatgt 480
gcccaaattt gaaaagttag gaagcactga tttcaaagca aatcattcac atttgaactg 540
tcttcagtgt acctcggccg cgaccacgct aagggcgaat tctgcagata tccatcacac 600
tggcggccgc tcgagcatgc atctagaggg cccaattcgc cctatagtga gtcgtattac 660
aattcacttg ccgtcggttt tacaacgtcg tgactgggaa aacccctgcg ttacccaact 720
taatcgncnt ggagcacatt ccccntttgg ccnactggcg taattaacca aaaaggnccg 780
gaccgaatcg gccntttcca acaagttggg ccaacctgaa tnggcnaaan ggcccccccc 840
tgtaaccggn gccattaaac ccccgncggg nnnntngggg tacccccaac ggggaccggt 900
taacttggcc anggccttaa ggcccggtcc ttttggtttn ttnccttccn tttttngccc 960
ntttnccngg nttttcccgn aaagntntaa aaaggggggg tccccnttta ggggtcccaa 1020
taaa 1024

<210> 46
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(1024)
<223> n = A,T,C or G

<400> 46
nnngnnnnnn nnnnnnngaa ttgggccctc tagatgcatg ctcgagcggc cgccagtgtg 60
atggatatct gcagaattcg cccttagcgt ggtcgcggcc gaggtacact gaagacagtt 120
caaatgtgaa tgatttgctt tgaaatcagt gcttcctaac ttttcaaatt tgggcacatg 180
tagaaagtat tttttataca gcacactggg gttaatggtg gaggctgctg atggctgaag 240
gtgactaatg cgaggggctt ccttgagcta aggatgtgtg ggtcagcatc tctacagcat 300
ctgaggattt ctgcttgtaa tcactttggt agaagtaact cattaacttt caagcctttc 360
tcacaaaatt ctctttagtt tctctaatca gagaaaaata tgagaagaat caatgatgag 420
acgatgcaaa cccacaccat acactttccc gcgtcccacc tcccttgtag ttctttaaca 480
ggccatgtgc aggagtgtct gtgtgtgtgt gtgtgtgtgt gtgcgcacat tttgtgtgca 540
caaaatgcgc cgtacctgcc cgggcggccg ctcgaaaggg cgaattccag cacactggcg 600
gncgttacta agtggatccc gagctcggta ccaagcttgg cgtaatcatg gncatagctg 660
nttcctgtgt gaaattggta tccgctcaca attccacaca acatacgagc ccggaagccn 720
taagtgtaaa agccctgggg tgcctnatga gtgagctaac tccattaaat tgcgttgccg 780
ctcactggcc ggtttcagtc cggnaaanct gcggncnact gcantaatga atcggncaac 840
gcccccggga aaaaagcggt tgcgaattgg gccctntttc cctttcttgg ttaatggact 900
ccntnngnct tnggccnttc ggnttnggnn naacgggatt aanttnnntt naaagggggg 960
naanacgggt ttncccnana aatcnggggn aaacccccng gaaanaaacn ttggncccaa 1020
nggc 1024

<210> 47
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 47
ggngnnnnnn aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtgcat ctgaacattg ccaagcccta 120
ggacattccg tagagcttgg ggattctgga ccaattggtt cagacaggac acgaaatgcc 180
tgtttgatgg gttctgcaat taaacaccca actactctct tttcatcaga tataaaaaga 240
aaagttttta ttttgtttgg acatttagga acaacttgct ggaagcccaa ttcattatca 300
acaagttctt ggacatcttc taccttttttg atagcaaagc ttggatcatg tggcagaacc 360
aacacgattt tcccatccca aaactctgct actacacgtt ctttcttcca acccacatat 420
ttgattcctt ccagaaacct gtggtgatgc tgtacctgcc cgggcggcaa gggcgaattc 480
tgcagatatc catcacactg gcggccgctc gagcatgcat ctagagggcc caattcgccc 540
tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga ctgggaaaac 600
cctggcgtt acccaactta atcgccttgc agcacatccc cctttcgcca gctggcgtaa 660
taagcgaaga ggcccgnacc gatcgccctt tccaacagtt gcgcagcct gaatggcgaa 720
tggacgcccc ctgtanccgg cgcattaaac cgccggcggg tnnttggggt accccncacg 780
gggaccggta cactttgnca aggccctaa cggcccggtc cntttcgctt tcttnccttt 840
cntttnttgg ccacgttngn ccgggttttc cccgtnaagc ttttaaaatn gggggcttcc 900
cnttttaggg gttccnaatt aanggcttta cgggaccctt gaccccnaaa aaactttnnn 960
tttnnggggg gnggggntnc ccntaggggg ccattgnccc ttgnnaaaaa anggtttttn 1020
nncc 1024

<210> 48
<211> 1017
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1017)
<223> n = A,T,C or G

<400> 48
gnnnnnnnga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttgccgc ccgggcaggt acagcatcac cacaggtttc tggaaggaat 120
caaatatgtg ggttggaaga aagaacgtgt agtagcagag ttttgggatg ggaaaatcgt 180
gttggttctg ccacatgatc caagctttgc tatcaaaaag gtagaagatg tccaagaact 240
tgttgataat gaattgggct tccagcaagt tgttcctaaa tgtccaaaca aaataaaaac 300
ttttcttttt atatctgatg aaaagagagt agttgggtgt ttaattgcag aacccatcaa 360
acaggcattt cgtgtcctgt ctgaaccaat tggtccagaa tccccaagct ctacggaatg 420
tcctagggct tggcaatgtt cagatgcacc tcggccgcga ccacgctaag ggcgaattcc 480
agcacactgg cggccgttac tagtggatcc gagctcggta ccaagcttgg cgtaatcatg 540
gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc 600
ccggaagcat aaagtgtaaa gccctggggt gcctaatgag tgagctaact cacattaant 660
gcgttgcgct cactggccgc tttccagtcn ggaaacctgt cgtgccagct gcattaatga 720
atcggncaac gcgccgggga aaaagcggtt gcgtaattgg gcgctctttc cgctttcttg 780
nttacttgac tccttgggct tcggccgttc ggntgcggnn aacggnattc aacttactca 840
aaaggcggna atacggtatt cccngnaatc nggggataac ccccggaaan aactttgacc 900
naaaggcccc caaaaggccc ngaacccgna aaaaagggcn cgnnnnnnnn ggggtttcct 960
aaggttccgg ccccctggnn aggtttccca aaaatngnnn cctttnannn nnnnngg 1017

<210> 49
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 49
ggngnnnnnn anatnaaacg ccagcttggt accgagctcg gatccctagt aacggccgcc 60
agtgtgctgg aattcgccct tgagctggcc gcccgggcag gtactgaaat tactctgaat 120
tcagaaatgt aagtatatgc agctaggtca taaagacact gctttagaga agacatgtat 180
tagtggaatg gaacaggtaa catctttgag aagtcaatga gttctgcatg cagggatttc 240
accatcggaa tgatggcaag aatgatgcct gcctgtgtgc ttctcagagg acgtataaag 300
ccactgagga tgagtgctac agtgcttgtg aattgtgggg ccacagacat ttaagttggc 360
attgcttttc tcctcctctg cttaatccac ctttataaat atggcagatg gcttaagaca 420
ggcatcatca gcatctctgg agatgtgggc tcagagggca agtgggggcc gtgggggttt 480
ccactagagg gagggaagtt tctgtttccc atgtgttagt tgtagttgtc tttgtgcttc 540
accagaaaag aggtagagtg cgcaccttca cactaagagc ccgaaattgt gggtcagtac 600
ttttttttt ttnnnttttt tggtnntttt tnnnnnnnnn nnnnntnnnn ngnnnnnnnt 660
tnnnttnnnn ngnnnnnnnn nnnnnnnnnn tttnntnngg nnnncncttn nnnnnnaann 720
nngnnnannn ncnnnnnnnn tngnnnnnnn nnnnncnttn ngggnnnang ncccnannnn 780
nccnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnccnannn nnnnnnntnn 840
nnnaanncnn tnnnnnnnnn nnnggnnnnn nnnnttnnan nnnnnnnnnn nngnnnaann 900
nnnnnnnnnn nnnnnnnnna annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 960
nnnnnnannn nnnanngggn nnnncccnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntt 1020
nngg 1024

<210> 50
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 50
ggagnnnntn nntncngant gggccctcta gatgcatgct cgagcggccg ccagtgtgat 60

```
ggatatctgc agaattcgcc cttagcgtgg tcgcggccga ggtacactga cttgagacca     120
gttgaataaa agtgcacacc ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     240
aaaaanaana ntaaaaaaaa tttnaaggta aagntnncnn ntnaaaatct tttagggnna     300
tccntatann nnttttcgnn tntttnnngg ntngncctct nntnccnnnt tttttnggna     360
ancccnaann cccngnctta ccnnatgngn canannttaaa anggtncntt nttnngngga    420
nctcannncc cccgccnttt tnntnngggg ggnttnncca nnggnggnna aatgcncngc     480
tnatnaanan gggnttnntc cnaaatnngn naancccctga ggnggnaanc ntnntggnct    540
tnntncngat tnngnnaccc ccncnngcag anntcnttgn nnccttantn ccgggggnta     600
naccccttcct ttaaaancnc nntgntntna aaaannnttt ncctgancna tcgggntaaa    660
ncnnnttttt tgaaaaccnn ggctttttnn aanangctcc gntnggcnaa ctttggggaa     720
naaggnnttt tttaaggcct tgctttttag ggccancccta anggngannn ncngttgnct    780
tgnnngatgg tttttagggn ttcccgggtg ggaccnttnt tggggggaaa ttttggnccn     840
aggggntccc ctnnaagaaa tccnnnnttcc nggncncnaa ttnccnnaaa aattnngggn    900
ccnaaannttt tnattgggaa ggncctttgg ttgccccnnt aaanggnccn naaaccttta    960
aangggggggn gcntttaatg gcncctttcn ggncccnaaa aaanggggnc cccccnnttt   1020
nagg                                                                 1024
```

<210> 51
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 51

```
gngnnnnntt aactcccgct tggtaccgag ctcggatccc tagtaacggc cgccagtgtg      60
ctggaattcg cccttagcgt ggtcgcggcc gaggtacttt ttttttcttt tctttctttt     120
tttttttttt tttaattttt gagatggagt tttgctcttg ttgcccacgc tggagtgcaa     180
tggcgcaatc ttggctcatt gcaacctcca cctcccggat tcaagcgatc cttctgcctt     240
agcttcccaa gtagctggga ttatagacgt gtgccaccat tcccagctga tttttgtatt     300
tttagtagag atggggtttc accacgttgg ccaggctagt ctcgaactcc cgacctcatg     360
tgatcctccc accgcagcct cccaaagtgc tgggattaca ggcgtgagcc accatacccg     420
gttgattgta gacttttgat tggtatttac aaggacccat gagaggcaac aaagagaagt     480
tgtcaagaga acagaccctg agaccaatag tttggctcaa gctctggctc cctaacttcc     540
taccagtttg accttgggca agttacctaa catctttgtg cctccatttt ctatttgtaa     600
aaggaaacta atagtagtgc ctactttata atagagttat tacaaatatt aaatgagtta     660
atatttgtaa agtaattaga aaaatgcctg gcacttcaaa agcagccttc atttattctt     720
tggaaataat tttaaatgaa ttcaagggtt atatgtagct tttaggcata tatncctaaa     780
tggcactgta aaactgcana aatatccgat ctttaaaaat ttttgggtaa atttatcata     840
atatggnaac caaatcccat ttaatggctt ttaggggtan ccgatnaaaa ccngaagttt     900
gcagtttaag ccncttatgg aangggaccc gaaattccaa gganccccann gggaaaaaac   960
cccnngagga atnttggccg ntttaantta aancctttgg gtnntttaag nncctaaaaa    1020
nttt                                                                 1024
```

<210> 52
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 52

```
gngnnnnnnt tnngnttcng antgggccct ctagatgcat gctcgagcgg ccgccagtgt      60
gatggatatc tgcagaattc gcccttcgag cggccgcccg ggcaggtact tcaaaactat     120
tcataagcaa aaatcagtgt caaaaatatt tagtaactta aaaaaaacaa aaagtataag     180
```

```
tagagacgga caagaactcc tcctgctttc tcccactggg ctcatcgtat ttctgttcca     240
ttacataaga gactaaaact gacaaactct gttttatcgc taacacctaa aagcaataaa     300
tgtgatttgt taccatatta tgataaaatt taaccaaaaa atttaaaaga tcggatattc     360
tgcagtttac agtgacattt atgtatatat gcctaaaagc tacatataaa ccttgaattc     420
atttaaaatt atttccaaag aataaatgaa ggctgctttt gaagtgccag gcattttttct    480
aattacttta caaatattaa ctcatttaat atttgtaata actctattat aaagtaggca     540
ctactattag tttccttttta caaatagaaa atggaggcac aaagatgtta ggtaacttgc   600
ccaaggtcaa actggtagga agttagggag ccagagcttg agccaaacta ttggtctcag     660
gggtctgttc tcttgacaac ttctctttgn tgcctctcat gggtccttgt aaataccaat     720
caaaagtcta caatcaaacc gggtatgggg ctcacgcctg taatcccagc actttgggga     780
ggctgcggtg gggaggatcc ccatganggt ncggagttcg agactagcct gggccaacgt     840
ggnggaaacc ccatctntac taaaaattcc aaaatcanct ggggaaggng ggcacacgtc     900
tataatccca cttccttggg aagcttaagg ncnnaaggac gcttggaaac ccggaanggn     960
gnggttcaat gganccccaaa atgngccatt ggnctttcnc gngggccaac angagccaaa  1020
ntcc                                                                 1024
```

<210> 53
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 53

```
gggnnnnnnn tnncttaacg cccgnttggt accgagctcg gatccctagt aacggccgcc      60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacattactt ggtgttaaca     120
ttgttggcag tggtagcccc ttttcagaaa gcaacttgct gtaagtcagg gtgtccgttc     180
caaccttcag ctagtgaaaa ggtagtaaca aatggtaaac aagagaatga ttgtttaaac     240
ctatctgtgg acacttaatg caactgttta aaaatgataa tcacgagtta tgtagcaacg     300
tggaaatata tttacagaac attaagtgga gaaagcagga cacgaaagta tatttatact     360
acagttataa ctcaacagtt catttatatg ctgttcattt aacagttcat ttaaacagtt     420
cattataact gtttaaaaat atatatgctt atagtcaaaa gctgttgtgg tgttgttgtt     480
gtaggcttat agttgagcat tatttctta aatttcttga atgttcttta tggtagtgtt      540
actaaaaagt ttatgatcac attttcattg tgaacataat ttgaactcat tatcacacac     600
ttggaaaata cagaaaagtg gaggaaaaaa aatcatatcc ccaccatcca aagacatata     660
ctctcctctt atcttgntca ttcttggttc tgngcacagg tttatgatta taactgngtc     720
aaaatgtata ttcaaaatag ctggtacatt acctttgngg nattatgggt aaatctttca     780
ctttaatttt ttcaaaggtc cctatnataa tggcccggat aaccgnggga tttaaggggg     840
ctcccatggn gggcataatn catacccnga ggaaaaattn naaaattaag gnaantattt     900
ttaaaaaatt ncctatattt cccaaaacct aacaactact ggtaaaaatn ttggaccggn     960
tccccctatt ntnggttaan ggcccaccct ttgggnaaaa ccggggtnaa aaattggggc    1020
ctaa                                                                 1024
```

<210> 54
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 54

```
ggagnnnnnn ttnngtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtacttttt tttttttttt     120
tttttttttt ttacatttat gcatacttat cactaacacc ctaataatca cagactagtg     180
cacagatcaa gatgttaaca gttaattgtt gttgggtgtt gggaatatgt gtgaattttc     240
tttactgaat ttccaaagtt ttgtatgagt atgtattata tttgtaatgg aaaatacata     300
```

cataaaattt attaccaaaa caccaaagat tatttaagga atttgagaca aaatatttaa 360
ccaaattccc acaatgacaa cactatttta gttattttcc acatcttttc atttaagact 420
ttatgcacac atatttaaca ctgttatcac aagcgtgtgc actgaaacaa gatagaggaa 480
acagatcaag atgttagcag tagttgttag gtgttgggaa tataggtaat tttttaaaat 540
aatttacttt attttctaat ttttcctctg ggtatgtatt atgcacacca atggagacac 600
acataataca ctgttatcag gacattatta tagggaacat ttgaaaaaat taaagtgaaa 660
gtatttaacc ataattccac aaaggtaatg taacagctat tttgaatata cattttgaca 720
cagttataat cataaacctg tgcacagaaa cnagaatgaa cnngattaga ngagagtata 780
tgtctttgga tggtggggat atgaattttt cctncacttt tctggatttt nccagtgtgn 840
gaaaaatgag ttccaaaata tggtcncaat ggnaaatgng ancntnaacc ttttagtanc 900
ccttnccttn aggaacattt caggaaantt tannaaaata anggctcaac ttttaggcct 960
acannancaa ccccncaaaa ggnttttgac tntttanccn tntatatttt taaccggttt 1020
taan 1024

<210> 55
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 55
gnngnnnnnn ttaactccag cttggtaccg agctcggatc cctagtaacg gccgccagtg 60
tgctggaatt cgcccttagc ggccgcccgg gcaggtacct cacatgggaa acatgggaag 120
taaaaccacc tgaggagcct cttgatggtg agtcaggctg ttcctcgaag agtaggctgt 180
gactgccaaa ctttgtaggt taaggagtat ttataatgat ctttgaggaa actgcaactg 240
acaattgagg gaaaaaaatg ttagttcatg actgcaaaat acatgacaga atcacaaaaa 300
ctattttaca agtttaaaaa acaaacctga tgctgatgca tggcaggcga accccaaagt 360
ggggcttagc ctgcaagggt tcttggcttc acccaggaaa ggattcaagg gcaagccagt 420
ggtaaggtgg aagaaaacac ctttatcaaa gcaacactgt tacagctcct gtggggtcac 480
agctcagtga ctgctcccag ggttgcccca taggcagggt gccgagagta gcagctgagc 540
ccagttttgc agtcatatgt atacctactt ttaattacat gcagattcag ggtgggtttg 600
cgcagaaatt gttaggaaaa gggtggtaac ttttgggtca tcaggtcatt gccgcttaaa 660
gtggtggtaa tgcctgagtt ttgccatggc aatggtaaac tgacaaggca cgctgcttgg 720
tgtgtcttac agaaagctgc ttncgctctg nccttggtta nctagccctc gancntttgg 780
ttgtaaatga accaagagaa gtcaccggcc cttggcgttt tcttcccaga agtacccttg 840
ggccgggaan cacgcttaag ggccaaattc ttgcagatat ccatnacact tggcnggncc 900
gnttcancct tgcattttaa aagggcccaa tttgnccctt taaanggagt cgantaccaa 960
ttnnnntggg ccgcgtttta acaacgtnnn ggacttggga aaaanccctg ggttacccca 1020
antt 1024

<210> 56
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 56
gnagnnnnnn ttnngttnca gantgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtact tctgggagaa 120
aacgccaagg ccgtgactct cttgctcatt tacaaacaaa agatcgaggg ctagctaaac 180
aaggacagag cggaagcagc tttctgtaag acacacccag cagcgtgcct tgtcagttta 240
ccattgccat ggcaaaactc aggcattacc accactttca gcggcaatga cctgatgacc 300
caaaagttac caccctttc ctaacaattt ctgcgcaaac cacccctgaa tctgcatgta 360
attaaaagta ggtatacata tgactgcaaa actgggctca gctgctactc tcggcaccct 420

gcctatgggg caaccctggg agcagtcact gagctgtgac cccacaggag ctgtaacagt 480
gttgctttga taaaggtgtt ttcttccacc ttaccactgg cttgcccttg aatcctttcc 540
tgggtgaagc caagaaccct tgcaggctaa gccccacttt ggggttcgcc tgccatgcat 600
cagcatcagg tttgnttttt aaacttgtaa aatagttttt gtgattctgt catgtatttt 660
gcagtcatga actaacattt ttttccctca attgcaagtt gcagtttcct tcaaagatca 720
ttataaatac tccntaaccc tacaaagttt ggcaagtcac agnctactct ttgaggaaca 780
agcctgactt accatcaaga agcttccttn angggggntta cnttccatgg tttcccatgg 840
tgaagganec tgncccgggc ggccgnttaa gggcgaaatt caacacactt gggnggccgn 900
tnnnttaang gatccnaact tgggancaa annnttgggg naaannatgg gnnnnnaact 960
ggnnnccggg ggggaaaatg gtatnccgnt tccaatttcc ccncnanntt tnnaanccccg 1020
gaan 1024

<210> 57
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 57
gngnnnnntt nantnaacgc cagcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actcatcact gacttgaagc 120
ttagtatctg gcttccttaa ggatgtaact ttcatgtaac agattaataa cttatatgaa 180
aaccaacaca accatatgtt tagggctgga aagggccatg acgcctggtc atttttcctg 240
ttttacctta ctcttatgtg tgtcacactt catcaattcc ggaaacagtt tctggagatc 300
tcctcattac ctcttttaca atcacctcac tccagcatgg tgtctgttac ctcttcccac 360
ttgtgacaat gtctagtaag gtccactctc cattctgtgt gatgaccact tattacaacc 420
ctcagaatag ggacagtgg tgtgcccct gcaatacaat ggtttctatc tcctgatact 480
tttattacac ctctagcagg atgtcttgtg atcctcctta ttgatttttc cctcacgatg 540
atgaacaatt atctcccgtt actcacctag cagtatctaa ctgtccctaa cacagcatgt 600
gggaatgccc tcaatacggt ggatgctgnt aactttcttc cttcccctca ggcaatggcg 660
gtgacttaca atgaaccata atggccacat ttcccaactg natttggaa cctcttctgn 720
ccccttcttt ctagganccc agttaaaaaa aaaaaaccaa aactagcccc aatgnctgtg 780
atgcccatta atcacttacc cagggctgan ccctncatta aantttgat gggatctctt 840
tggnttccca attggccgtt naacccaagn ctgntggatt cccaanttnc cccattgntt 900
taatgcgggt cccttaanca ncccttggnt actggacctg gccngggngg gccctttttaa 960
aaagggcaaa ttntggagaa aatnccttnc acttgggggg ccnttnnaac atggcntttt 1020
aang 1024

<210> 58
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 58
gngnnnnntt nngtttggcc ctctagatgc atgctcgagc ggccgccagt gtgatggata 60
tctgcagaat tcgccctttc gagcggccgc ccgggcaggt acagtagcca agggtgacta 120
aggaaccgca tgaagcaatg tgggaaattg ggaatcagca gacattgggt taacgggaca 180
atggggagcc aagagatacc atcaaaattt aatggagggg tcagacactg tgttagtgat 240
taatgggcat caacagacat tgggctagtt tttgtttttt ttttttaact ggggtcctag 300
aaagaagggg acagaagagg ttccaaaata cagttgggaa atgtggacat tatggttcat 360
tgtaagtcac cgccattgcc tgaggggaag gaagaaagtt aacagcatcc accgtattga 420
gggcattccc acatgctgtg ttagggacag ttagatactg ctaggtgagt aacgggagat 480
aattgttcat catcgtgagg gaaaaatcaa taaggaggat cacaagacat cctgctagag 540

```
gtgtaataaa agtatcagga gatagaaacc attgtattgc agggggcaca ccactgtccc    600
ctattctgag ggttgtaata agtggtcatc acacagaatg gagagtggac cttactagac    660
attgtcacaa gtgggaagag gtaacagaca ccatgctgga ntgaggtgat tgtaaaagag    720
gtaatgaaga gatcttccag aaactgtttc cggaattgat gantgtgacc cnccttaaga    780
ntaaggtaaa acaggaaaaa tggnccaggc gtnatnggcc cttttcagnc cttaaccttt    840
attggtgggg tggtttcata taagttantt aatctggtnc cctgaaagtt tccttccttt    900
anggaaaccc gantcctaan cctttnaagt ccnnggatga gacccttggn ccgggaaccc    960
cccttaaggg cgaaattccn ncccacttgg gngggccntt nncttaaggg acccaacttg   1020
ggcc                                                                1024
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<210> 59
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 59

```
gagnnnnnnt taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt     60
gctggaattc gcccttagcg tggtcgcggc cgaggtacct ggttttcttt caactcttca    120
atttcccatc ttccatcgta tattgaaatt tcctcatcca tgtcatcttt ctttgctttt    180
gataagaccc atccagccaa ccttccacta tcaaaagttt ctgcaaaata tacttctcct    240
ataggttgag gtgtcttata tttaatctct gaggaaagtt cactttcatt aacatcaatt    300
tcttctgaat ttcttcaaa gtcttccgtc tcaacatcat catccataaa ttctgcatta    360
attgagatga acagaagacc caaacataac caaaaggctt ggaaatgcat attgattatc    420
tctcttgcgg cctgttttcg gcagtgacag ctcagatgtc caagtcgttg ccacttggtc    480
cccgcgtctc ttcagaccag tcccccccgc gtacctgccc gggcggccgc tcgaaagggc    540
gaattctgca gatatccatc acactggcgg ccgctcgagc atgcatctag agggcccaat    600
tcgccctata gtgagtcgta ttacaattca ctggccgtcg ttttacaacg tcgtgactgg    660
gaaaaccctg gcgttaccca acttaatcgc cttgcagcac atcccccttt cgccagctgg    720
cgtaataacg aaaagcccgc accgatcgcc ctttccacag ttgcgcagct gaatggcgaa    780
atggaccccn ccctgtancg gcgcattaan ccnccngcng gttnntgggg taccccccaac    840
ggggaccggt acactttgnc aagggcctaa cgnccggttc ntttggtttc ttncctttcn    900
ttnttngcac gttngnccgg nttttcccgt naagctttaa aatngggggc ttccccctttt    960
angggtcccn aataaaggtt ttacgggan c ttgaaccccc aaaaaacttt gnnttnaggg   1020
ggga                                                                1024
```

<210> 60
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 60

```
gnnnnnnttn ngttncngaa ttgggccctc tagatgcatg ctcgagcggc cgccagtgtg     60
atggatatct gcagaattcg ccctttcgag cggccgcccg ggcaggtacg cggggggac    120
tggtctgaag agacgcgggg accaagtggc aacgacttgg acatctgagc tgtcactgcc    180
gaaaacaggc cgcaagagag ataatcaata tgcatttcca agccttttgg ttatgtttgg    240
gtcttctgtt catctcaatt aatgcagaat ttatggatga tgatgttgag acggaagact    300
ttgaagaaaa ttcagaagaa attgatgtta atgaaagtga actttcctca gagattaaat    360
ataagacacc tcaacctata ggagaagtat attttgcaga aacttttgat agtggaaggt    420
tggctggatg ggtcttatca aaagcaaaga aagatgacat ggatgaggaa atttcaatat    480
acgatggaag atgggaaatt gaagagttga aagaaaacca ggtacctcgg ccgcgaccac    540
gctaagggcg aattccagca cactggcggc cgttactagt ggatccgagc tcggtaccaa    600
gcttggcgta atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc    660
```

```
cacacaacat acgagcccgg aagcataaag tgtaaagccc tggggtgcct aatgagtgag     720
ctaactcaca ttaaatgcgt tgcgctcact ggccgctttc cagtcnggaa accctgtcgt     780
gccagctgca ttaatgaatc ggccaacgcc ccggggggaaa aagcggnttg cgtattgggc    840
gctcttccct ttcttgntta cttgactcgc ttgggcttcg tcgttcggct gcggcnaacg     900
gnatcagctt actcaaangc gggaaatacg gtantcccca gaatccnggg gattaccccn     960
ggaaaagaac ctgtgagccn aanggccccc aaanggcccn gaaccntaaa aaanggcccg    1020
tnnn                                                                 1024
```

<210> 61
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 61

```
gggnnnnnnt tncttacacg cccgcttggt accgagctcg gatccctagt aacggccgcc      60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtacaaatg gttttatgtc     120
accaattttg ctgcaagaat gggaactgct tttaaatctg taaatagctc ttaacatttg     180
ttgtatgcac tcttttctta ctatggctgt caacacttgt gtagggttta atttctaaat     240
tgttggcatg ttcttttttct caggctattc agaagtaaca acatttttca tttcagacat    300
gcaatcacct attaatgatg aaatatttta ccactttggg aatatttaat tagtttagtc     360
atggagaata cttcccacat tttaagattt ttcaaatatc actgtcattt ctattttagc     420
attttatcaa attattgctt ttttatttta taataaggct taagacagat tatagacctc     480
cttaagagat gagtttcttc ttctaaaaat gcatgttgat agaggactat ttaggctaat     540
cggaggaatc attaagaaag aaagttttaa cactgtttat ccctatctgc tttccttgca     600
ctttttctgt gaaaaatatt ttctgtttgc aaaatcttcc ctgagttctg aacccagcac     660
catcagtacc tcggccgcga ccacgctaag ggcgaattct gcagatatcc atcacactgg     720
cggccgctcg agcatgcatc tagagggccc aattcgccct atagtgagtc gtattacaat     780
tcactggccc gcgnttttac aacgtcgtga ctgggaaaac ccctgcgtta cccaacttaa     840
acgcccttgc agcacatccc ccttttgncc aantgcgtaa ttaccaaaaa ggcccgnacc     900
gaacggccnt ttcccaaagg tggcncaacc ctgaaatggc aaatgggccc ccccccttgaa    960
ccggngccnt taancccccc nccgggnntt tnggggtccc cccacggnga nccgttaaac    1020
ttgc                                                                 1024
```

<210> 62
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 62

```
gnagnnnnnn ttnngnttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct tagcgtggtc gcggccgagg tactgatggt gctgggttca     120
gaactcaggg aagattttgc aaacagaaaa tatttttcac agaaaaagtg caaggaaagc     180
agatagggat aaacagtgtt aaaactttct ttcttaatga ttcctccgat tagcctaaat     240
agtcctctat caacatgcat ttttagaaga agaaactcat ctcttaagga ggtctataat     300
ctgtcttaag ccttattata aaataaaaaa gcaataattt gataaaatgc taaaatagaa     360
atgacagtga tatttgaaaa atcttaaaat gtgggaagta ttctccatga ctaaactaat     420
taaatattcc caaagtggta aaatatttca tcattaatag gtgattgcat gtctgaaatg     480
aaaaatgttg ttacttctga atagcctgag aaaaagaaca tgccaacaat ttagaaatta     540
aaccctacac aagtgttgac agccatagta agaaaagagt gcatacaaca aatgttaaga     600
gctatttaca gatttaaaag cagttcccat tcttgcagca aaattggtga cataaaacca     660
tttgtacctg ccccgggcgg ccgctcgaaa gggcgaattc cagcacactg gccgnccgtt     720
acttagtgga tccgagctcg gtccaagcct tgcgtaaatc atggnccata ntggttcctg     780
```

```
nggtgaaatt ggtatcccgg tcacaatttc nccccancat acgaanccgg aagccntnaa     840
gngtaaaanc cctgggtggc ctaatgagtg aactaactca catttaaatg cgtgcgctta     900
ctggcccgtt ttccaatcng ggaaanctgt cgngcccact ggntttaang aatcggccan     960
gcccccnggg gaaaaaagng gttgcnnatt gggccctttt tcggttcctt ggttantgga    1020
atcn                                                                 1024
```

<210> 63
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 63

```
gagnnnnnnt taacnccccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt     60
gctggaattc gcccttagcg tggtcgcggc cgaggtacat tgacttcatt actaaagaac    120
aaaaatgttc atttttgtcc cagtaaattg agactgcttg tacttttttt ttttttttt     180
ttttttttt ttattaaaat actgagtttt atttcacatg tatattttg tctccccacc     240
atttccatgt ctgaccaccg ctactactat gtcctatcat aacattccat acatacttaa    300
aaccaagcaa agggtggagt tccatcttta aaaactaaac ggcattttgg acaacacatt    360
cttggcaata naacctggac aacatttatc aaacacggta gggaaagttc tcactctgca    420
ttataaaaag gacagccaga tatcaactgt tacagaaatg aaataagacg gaaaattttt    480
taacaaattg tttaaactat tttcttaaag agacttcctc cattgccaga natcttgaat    540
agcctcttgg tcagtcatcc ggaagcaatt cttcacataa ttgatgaatt tggcttccac    600
tttgggaaga gaaccacctt tttctatact tgcttgcatt tttgctttaa tgncttctac    660
agaactaggt ccttttggng ttttaggagt tttttcctgn ttcttgaagg attcttggcc    720
ttttganctt ggggttgaaa ganggntttg agtcttttca ttctgaattg acttttgggc    780
atttttggct ggagnatctc ggatagattt cttcactggg gctttttctt nagntttcct    840
catatcaaaa tcntcatcat catcancttt atnaanatcc cctttaatna anatcggnat    900
tnatntttat tnagcngcaa ggtttacttt ttttctgggg gaanctttgt tanccccttt    960
cagggggcaa aaccggtttt ccaaaaatnc ccttaanaat ttnccaaanc cnccnccntt   1020
ttaa                                                                1024
```

<210> 64
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 64

```
ggagnnnnnn ttnngtttcc gaattgggcc ctctagatgc atgctcgagc ggccgccagt     60
gtgatggata tctgcagaat tcgcccttag cggccgcccg ggcaggtaca gccaacggtt    120
tcccttgggg gctttgaaat aacaccacca gtggtcttaa ggttgaagtg tggttcaggg    180
ccagtgcata ttagtggaca gcacttagta gctgtggagg aagatgcaga gtcagaagat    240
gaagaggagg aggatgtgaa actcttaagt atatctggaa agcggtctgc ccctggaggt    300
ggtagcaagg ttccacagaa aaaagtaaaa cttgctgctg atgaagatga tgacgatgat    360
gatgaagagg atgatgatga agatgatgat gatgatgatt ttgatgatga ggaagctgaa    420
gaaaaagcgc cagtgaagaa atctatacga gatactccag ccaaaaatgc acaaaagtca    480
aatcagaatg gaaaagactc aaaaccatca tcaacaccaa gatcaaaagg acaagaatcc    540
ttcaagaaac aggaaaaaac tcctaaaaca ccaaaaggac ctagttctgt agaagacatt    600
aaagcaaaaa tgcaagcaag tatagaaaaa ggtggttctc ttcccaaagt ggaagccaaa    660
ttcatcaatt atgtgaagaa ttgcttccgg atgactgacc aagaggctat tcaagatctc    720
tggcaatggg agaagtctct ttaagaaaat agtttaaacc atttggtaaa aaattttccg    780
tcttatttca tttctgtacc agttgatatc ctgctgtcct ttttataatg cnaagtggag    840
aactttccct accggtttgg ataaatgttg gncaggttct attgcccaag aatgtgtgnc    900
```

```
ccaaaatgcc cgntagtttt tnaagatgga acttcacccn tttgcttggn tttaagtatg     960
nntngaangt ntgatnggac cntatnntna ccgnggncaa ccttggnaaa tggtggggag    1020
acaa                                                                  1024

      <210> 65
      <211> 1024
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(1024)
      <223> n = A,T,C or G

      <400> 65
gggnnnnnnt aactnnacgc ccgcttggta ccgagctcgg atccctagta acggccgcca      60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actctgctga tctctgcctt     120
gtaatggaaa tgtttcattc attaatgtta ttgatatggt tgcactatgt ccgtaatttt     180
gctttttgtg tatctgtcta atgtttttta ttctcctttt tctcttttac tattttcttt     240
taaattaagt aaatagttcc taacgtagta ttttattttc ttaaaataaa tcaaactcac     300
ttataaaata tatttcatat tactttctta tcgattgctg tatgccttac aacatacatc     360
ttatcagact caacatttat agtaacataa atccattgag acatagtaac attaattctt     420
tataggtcta tttattctac ttattcaata attgttatat atatattaca tctacatgtt     480
acaaacacaa aaatatattg ttataatgct tgttttatg taattttatg tcttttaaag      540
aacatgagag aagaaaggaa agcaaagtaa ctattagcat tgttatgtta acattattct     600
ttacaatttc tggttctctt catttttttc ctgttgattc aagttgtatc ttagtgtcat     660
ttcatttctt taatacaact ttgctccaat tatttctttt gtgctcttaa tgtcaaatat     720
attaagtttt gnttgcatta taggctcaac actattatac atatattggt ttatgcattt     780
attttgaatt aagagaaaat aaaaatatgc aatttaatgg cttatatact attcatataa     840
ttaccctcta tgagggtnca ttatatatgn attccaaccn tatttataaa ntccaaanta     900
cctggtangt gccnaaaggc tcctaagcct attagcccgg aaaaaaaatc cctgggtant     960
tccttggnaa gggaggtttg attgccacca acctntttta natngggttg ggttttaata    1020
aacc                                                                  1024

      <210> 66
      <211> 1024
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(1024)
      <223> n = A,T,C or G

      <400> 66
ggagnnnnnn ttgngtnngg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtactccag cctgggtaac     120
agagggagac tctatgccaa acaaacaaac aaacaaacaa acaaacaatg gagaccagaa     180
agcaatgaga tgaaatgttc aaagtgctga aagaaaaaaa aaggtcaacc aaaagtctta     240
tatccagaat atttttcaaa gtataaaagc aaaatacatt ctcagataat aaaaacaaaa     300
caaactaaaa gagtttgttg ctatcatacc taccttacaa gaaatactca gtgatttttt     360
tcaggctaat aggctaggag catttggcac ctaacagtaa tttgaattta tatatatgtt     420
tgtatacata tatatggaac actcatagag gtaattatat gaatagttat ataagacatt     480
aaattgcata tttttatttt ctcttaattc aaaataaatg cataaaacaa tatatgtata     540
atagtgttga gcctataatg caaacaaaac taatatattt gacattaaga gcacaaaaga     600
aataattgga gcaaagttgt attaaagaaa tgaaatgaca ctaagataca acttgaatca     660
acaggaaaaa aatgaagaga accagaaatt gtaaagaata atgntaacat aacaatgcta     720
atagttactt tgctttcctt tcttctctca tgntctttaa aagacataaa attacataaa     780
aaccaagcat tataacaata taattttggg tttggaacat ggtagatgta tatatatata     840
ccattattgg ataagtagaa taaataggac tattaaggaa ataatggtac tatggctcaa     900
tgggantaag gtacctataa nggtgagcct gganaggaag natgttgnaa ggcttccggc     960
aatcggttta gaaagtantt tggaaatata ttttnatnaa gngggttgga ttaatttagg    1020
```

aaaa 1024

<210> 67
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 67
gagnnnnnnt taactccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gccctttcga gcggccgccc gggcaggtac tttttttttt tttttttttt 120
ttttggaaaa tgagattttt gactttaaca aaacaaatac agattgaatt taccaaatat 180
tgataattca tgtanaacgg gtgccacaga ttttaaagta tcaaaaccaa gagggcatca 240
caaaataaac tttggtgaaa aatatcttca tcaaagaaga aaatatgaga agagtagtcc 300
ttatgcagtg aggagaaata tatttggtaa agtaaatatg ggtagtagat actgaatcta 360
tagatagcat atattccaaa tgttttttag ggaatatcaa atcagatgat gcttanatgt 420
tatagtaata tcacttatct catttggaat gaaatttaat gtttttttaat aaatagcaaa 480
ttttcatttt ttcactacct ttataaaaca aattaaatat ttagagtata actgatcata 540
actaacatca ccttgcattt actaataaat actctaaata catttggttt attattggaa 600
tttatatcct tataatttta cctgctagaa attagtgacc ttgtggcatt atgtttaaag 660
tttacatttt cccagtgatg tgaacagtat ttatacntaa aatggatatc tgnccaatga 720
atagtaacca tgtttggtgg tttaaaaacc gnacatggtt tagtttgaca ttggcatgtc 780
tcttcagaaa ttnaaaaggt atcntttaag ggatggcttt tnggaaatca ttaataaact 840
accntctggg aaaangaatn ccaatttcaa gaagctacct aantagaact cagacccccn 900
gggcagggtn ttggnanaaa angctttcaa ttncaaattn nttntccgnn gnaaaccgaa 960
ngggacccctt annngnntgg accncctttc cngnaaactg gttttaaaat aaaaatttcc 1020
gnnc 1024

<210> 68
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 68
gnngnnnnnn ntnnnttcga attgggccct ctagatgcat gctcgagcgg ccgccagtgt 60
gatggatatc tgcagaattc gcccttagcg tggtcgcggc cgaggtacct agtagatcta 120
ctgagattaa acgggacctg tttggagcag aacctttttga cccatttaac tgtggagcag 180
cagatttccc tccagatatt caatcaaaat tagatgagat acaggagggg ttcaaaatgg 240
gactaactct tgaaggcaca gtattttgtc tcgacccgtt agacagtagg tgctgacatc 300
aagaacaaga aatcctgatt catgttaaat gtgtttgtat acacatgtca tttattatta 360
ttactttaag ataggtatta ttcatgtgtc aatgttttta aatattttaa tattttgaaa 420
atttctcag ttaaatttcc tcaccttcac tattgatctg taatttttat tttaaaaaca 480
gcttactgta aagtagatca tacttttatg ttcctttctg tttctactgt agatgaattt 540
gtaattgaaa gacatattat acaaatacct gccttgtgtc tgagttctat ttagttagca 600
tcttgaaatt tgtattcatt ttccagatgg ctagtttatt aatgatttcc caaaagccat 660
accttaaaga taacttttta aattctgaag agacatgcca atggcaaact aaacatggtc 720
tggttttaaa ccaaccaaca tgttactatt cattgggaca gatatcattt tatggataaa 780
tctggtcaca tactggggaa atggaaactt taaacataat ggccccangg cactaatttc 840
ttaccggtaa aaatnttang ggtttaaant nccatattna acccnatggt tttaaaggat 900
ttattntaaa ngcnngggga ngtannttg acagtntncn ctaaaanttt aaatgggttn 960
ttaaaggtnt gaaaaaanga aaaattgctt ttttttnaaa acctttaant cntttccnag 1020
gggn 1024

<210> 69
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 69
```
gggnnnnnnn tnncttanac gccnngcttg gtaccgagct cggatcccta gtaacggccg      60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg caggtactcc ggtcggtgtc     120
agcagcacgt ggcattgaac attgcaatgt ggagcccaaa ccacagaaaa tggggtgaaa     180
ttggccaact ttctattaac ttatgttggc aattttgcca ccaacagtaa gctggccctt     240
ctaataaaag aaaattgaaa ggtttctcac taaacggaat taagtagtgg agtcaagaga     300
ctcccaggcc tcagcgtacc tcggccgcga ccacgctaag ggcgaattct gcagatatcc     360
atcacactgg cggccgctcg agcatgcatc tagagggccc aattcgccct atagtgagtc     420
gtattacaat tcactggccg tcgttttaca acgtcgtgac tgggaaaacc ctggcgttac     480
ccaacttaat cgccttgcag cacatccccc tttcgccagc tggcgtaata gcgaagaggc     540
ccgcaccgat cgcccttccc aacagttgcg cagcctgaat ggcgaatgga cgcgccctgt     600
agcggcgcat taagcgcggc gggtgtggtg gttacgcgca gcngtgaccg ctacacttgc     660
cagcgcccta cgcccgtcct ttcgctttct tcccttcctt tctcgccacg ttcgccggct     720
ttccccgtca agctctaaat cgggggctcc ctttagggt tccgaattan tgctttacgg      780
accttgaccc caaaaaactt gantanggtg atgggtcacg taatgggccc atnggccttg     840
anaaagacggt ttttcgccct ttgacngttg gagtccacgt tctttaaaag gggactcttg     900
gttccaaact ggaacaaccn nttaanccttt atttngggct aatcctttgg aattaatnag    960
ggattttgcc caatttgggc ccttnggtta aaaaaagggg cttgntttaa ccaaaaattt    1020
aacc                                                                1024
```

<210> 70
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 70
```
ggagnnnnnn ttnngtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct tagcgtggtc gcggccgagg tacgctgagg cctgggagtc     120
tcttgactcc actacttaat tccgtttagt gagaaacctt tcaattttct tttattagaa     180
gggccagctt actgttggtg gcaaaattgc caacataagt taatagaaag ttggccaatt     240
tcaccccatt ttctgtggtt tgggctccac attgcaatgt tcaatgccac gtgctgctga     300
caccgaccgg agtacctgcc cgggcggccg ctcgaaaggg cgaattccag cacactggcg     360
gccgttacta gtggatccga gctcggtacc aagcttggcg taatcatggt catagctgtt     420
tcctgtgtga aattgttatc cgctcacaat tccacacaac atacgagccg gaagcataaa     480
gtgtaaagcc tggggtgcct aatgagtgag ctaactcaca ttaattgcgt tgcgctcact     540
gcccgctttc cagtcgggaa acctgtcgtg ccagctgcat taatgaatcg gccaacgcgc     600
ggggagaggc ggtttgcgta ttgggcgctc ttccgcttcc tcgctcactg actcgctgcg     660
ctcggtcgtt cggctgcggc gagcggtatc aagctcactc aaaggcggta atacngttat     720
ccacagaatc aggggatac gcaggaaaga acatgtgaac caaaaggcca caaaaggcca      780
ggaacccgta aaaaaggccg cgttggctgg cgtttttcc atangcttcc ggccccccttg     840
acgagcatta ccaaaaatcg acgctcaagt tcaaaggtgg cgaaancccg accggactnt     900
taagaatccc agcgtttncc cctggaactt ccttgggcgc ttttctggtt ccaaccttgc     960
cgttaccgga tacctggncc gcntttttcc ctttngggaa accngggcnt tntcaaaant    1020
taac                                                                1024
```

<210> 71
<211> 1024

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 71
gagnnnnnnt taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttttttttc tttttttaca 120
tctgatttta atgcttcgtt aacttcaaaa ggaactggta gagttcagaa ggtgagctgt 180
tgtttttcta aacctcttcc caggaagggg acattgacac ttgaattttt gtcacctttt 240
tcctcattag aaggaaagta gaaagcctta ctgtaggatt tttaaaaaaa aatccatctc 300
accccatatt ggtcttaaat aagtatagac taattaacct aagctacctt taacaacgta 360
gaatttagat gggttcatat atgtgagaaa aacctgaata taggacaggg gtcctacttt 420
tttccccacc tctgtcgccc aggctagagt atagtggtgt gatcttggcc cactgcaacc 480
tctgcttcct aggttcaagt gattctcctg cctcagcctc ccaagtagct gggattgtaa 540
gagtatgcca ccacgcccag ctactttttg tatttttagt agagacaggg tttcatcatg 600
ttggccagga tggtctctta actcctgccc tcaagtgatc caccagagag gagatcctcg 660
gcctccccaa gtgctgggat tataggcatg agccaccgtg cccagcctac tttctaatta 720
attaaaaaaa aaaaaaaaac ttcccaaatg agctgataaa aaactgacgt gaggctgctt 780
tgccttcaat aatacctagt tttcagctgt tccaactcgt ttccaaattg gaaattanct 840
ggaacnccac tacagtaatc ttcanggaan gggaaaatta ggccttaaaa gaatccccag 900
aaagttcanc atnggnancc tgnccnggcc ggnccgttca aaangggcna aatttgcaga 960
aattccatna cacttggcgg gccgttcgan catggctttt aangggccca attgnccctt 1020
aaag 1024

<210> 72
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 72
gnagnnnnnn ttnnnttccg aattgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta ccatgctgac 120
ttcttggtat cttttaaggc ctaattttcc cttccttgag attactgtag tgtgttccag 180
ctaatttcta tttggaaacg agttggaaca gctgaaaact aggtattatt gaaggcaaag 240
cagcctcacg tcagtttttt atcagctcat ttgggaagtt tttttttttt ttttaattaa 300
ttagaaagta ggctgggcac ggtggctcat gcctataatc ccagcacttg ggaggccgag 360
ggatctcctc tctggtggat cacttgaggg caggagttaa gagaccatcc tggccaacat 420
gatgaaaccc tgtctctact aaaaatacaa aaagtagctg ggcgtggtgg catactctta 480
caatcccagc tacttgggag gctgaggcag gagaatcact tgaacctagg aagcagaggt 540
tgcagtgggc caagatcaca ccactatact ctagcctggg cgacagaggt ggggaaaaaa 600
gtaggacccc tgtcctatat tcaggttttt ctcacatata tgaacccatc taaattctac 660
gttgttaaag gtagcttagg ttaattaagt ctatacttat ttaagaccaa tatggggtga 720
naatggattt tttttaaaa atcctacagt aaggctttct actttccttc taatgaggaa 780
aaaggtgacc aaaantcaag tggcaatggc ccctttctgg ggaaaagttt anaaaaacca 840
ccggttanct tntggaactt ttacccagtt ccctttgaa gttaccgaag cctttaaaan 900
cagatgttaa aaaaggaaan nnnaaaaagt ncctttggcc gggaacccnc ttaaggcca 960
aattccacac acttgggggg ccgntnccnt anggatccca ncttgggncc aaannttggg 1020
gnaa 1024

<210> 73
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 73
```
gagnnnnnnt tnacttacac gccngcttgg taccgagctc ggatccctag taacggccgc      60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactgtgtt atggcacaga     120
caatgcttgc ttagcggtgc cttgttacat aggtggatgc agagtgcgca cacgggatga     180
tggcaataaa gacctcactc agtcgttgga atgaaggaac taggtaactg cttcaacaag     240
gacggtctca gctctacctt atctctcaac agagtgcaaa cactgagtgt gagctcagat     300
gtcatcttgt tcctctttaa aattcaccaa attcttttgc acatttttct gttatagaga     360
cacggatatc ttcttcttca tagtcatcaa agttgctggt atctccagag cctctaaact     420
ttggtatgaa tggagcttca accttcctct ggtaaatagc aatccaatct gtcgtggcaa     480
accacttgtg agtttttata tcactgacac cattctttag atttccaaat ctcttgatca     540
aatccacctg cagcaggttc cgtagaaggt ccttgagatc tgaactgaag tgggatggga     600
atcggacctt tccagaaaca atctttttcat aaatctgaat tggttggtct gcaaagaatg     660
ggggatagcc agctgccatt tcatagatta gcactcctaa tgcccaccaa tccactgcct     720
tattgnagcc cttgctgaga attatttctg gagccaaata cctctggagt tccacataat     780
ggccaagttc tgcctttaac tcttttggca aaccccaaaa gtctgtgacc cgggatatag     840
ccctgatggn ccaatttaag aagaattttc angggtttaa aaactctggt aaatgaaggc     900
taanggaaat ggaggnacct tttttttttt nnnnnnnttt ttttttnaa acnttgtaaa     960
aggccaaaat tttggctana anttantttc aaagnttnaa accntttcca aatttttttt    1020
taat                                                                 1024
```

<210> 74
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 74
```
ggagnnnnnn nttgagttcc ggccctctag atgcatgctc gagcggccgc cagtgtgatg      60
gatatctgca gaattcgccc tttcgagcgg ccgcccgggc aggtacagtc aactgcattt     120
ttctctggtg accaagcttc cactgacaag gaagaggatt atattcgtta tgcccatggt     180
ctgatatctg actacatccc taaagaatta agtgatgact tatctaaata cttaaagcct     240
ccagaacctt cagcctcatt gccaaatcct ccatcaaaga aaataaagtt atcagatgag     300
cctgtagaag caaaagaaga ttacactaag tttaatacta aagatttgaa gactgaaaag     360
aaaaatagca aaatgactgc agctcagaag gctttggcta aagttgacaa gagtgggatg     420
aaaagtattg atacctttttt tggggtaaaa aataaaaaaa aaattggaaa ggtttgaaac     480
tttgaaaata aaatctagca aaaatatttg ctttttacat gttttaaaaa aaaaaaaaaa     540
aaaaaaaaaa aagtacctcc attcactaga cctcatctac agagatctaa aacctgaaaa     600
tctcttaatt gaccatcaag gctatatcca ggtcacagac tttgggtttg ccaaaagagt     660
taaaggcaga acttggacat tatgtggaac tccagagtat ttggctccag aaataattct     720
cagcaagggc tacaataagg cagtgggatt ggtgggcatt aggagtgcta atctatgaaa     780
tggcactggc tatcccccatt cnttgcagac ccacccattc agaatttatt gaaaaagatg     840
gttcttggaa ngnccgaatt cccattcccc ttcagntcna actcaagggc ccttttacgg     900
aancctggtt gcanggggga ttgatccagg anaatttgga aatcttaaag aaaagggggnc    960
cggggtttta aaaacctcnc aagngggttt gcccccancg naatgggatt ggtttttccc    1020
ccna                                                                 1024
```

<210> 75
<211> 1024
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 75
gagnnnnnnt taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtacta tatgtatttt attaaaaatg 120
tggaagatta atctgtttct ctctgaatgt agattttcac caaaacatct cttaaaacag 180
cagggactca acacttaaaa atgaactaga agagctgggc acagtggctc acgcctgtaa 240
tcccagcact ttgggaggcc gaggcgggca aatcacttga ggtcaggagt tcgagaccag 300
cctggccaac atggtgaaac cctgtctcta ctaaaaacac aaaaattaac tgggcatggc 360
ggcacacgcc tttaatccca gctactcaag aggctgaggc aggagaatcg ctttgaacct 420
gggaggcaga ggttgcagtg tgctgagatc ataccactgc attccagcct gggcgacaga 480
gcaagactcc acctcaaaaa aaaaaagaag aaaagaaaat agtagtctca gccaggcgtg 540
atggctcaca cctgtaatcc cagcactttg ggaggccaag gtgggcagat cacctgaggt 600
caggagttcg agaccagcct ggcctacgtg gcaaaacctc atctctaata aaaatacaaa 660
aattagcttg ggcgtggtgg catgcacctg tcatcccagc tatttgggag gctgagacag 720
gagaagtcgc tttgaacctg ggangcagaa aattgcggtg aagctaagat cgcacgactt 780
cacttccacc tgggcaaaag anggaactct atctcaaaaa aaaaaaangg aaaaagtagt 840
ctntaagaca ctgggcaaac cttgaaagga attgagcagt cctcactttn ctgnagtcan 900
tttgntnaat gccacatggc tcttttgnaa gaaatttgag agctttttc taatcccaat 960
ttttntaatt tgggaattcc tttttccgga tttttcntt gccnggnggt gttcccaang 1020
gcct 1024

<210> 76
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 76
gnngnnnnnn ttnnnttgng antngggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta ctctttgtgg 120
ctggcttctt tttctgcaca caatgcctat gagaccataa ctaaagtcaa attccatggt 180
cactaaccaa taatggcatc tcaaagaaat tccaacctag agaaattctg atgatgtggt 240
tagaacacca atcaggacac tcacttcatg gttgataatt cccgacatgc actgattcag 300
acccagctta ttgaattcat tgagtccaca ggccagcact ttgcctgact gggtcaacag 360
aaatgtccca tcacagccac attgaactgc aacaataatc aaggccttgg gaacatccac 420
ctgcaagaaa aaaatcagaa aaagaaatcc caaatatata attcgtatta gaaaaaaagc 480
tctcaaattc tttcaaaaga gacatgctgc atttagcaga atgactacag gaaagtgagg 540
actgctctat tcttttcagg tttgcccagt gtcttagaga ctacttttc tttttttttt 600
tttgagatag agtttccctc ttttgcccag gctggagtga agtccgtgcg atcttagctc 660
accgcaatct ctgcctccca ggttcaagcg acttctcctg tctcagcctc ccaaatagct 720
gggatgacag gtgcatgcca ccacgcccag ctaatttttg gatttttatt agagnatgag 780
gttttgccac gtaggccaag ctggncttga acttctgacc ctcaagtgac tggccaccct 840
tgggccttcc aaagtgctgg gaattacagg gngagccatt acgcctggnn tgaaactcca 900
atttcttttc ttcnttttt ttttggnggg gagcttgctn tgcncccaag ctgggaaagc 960
cangggatga cttnnnncac tggaaccttg gcttcaggtt taaagggatt tctggcttaa 1020
nccc 1024

<210> 77
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)

<223> n = A,T,C or G

<400> 77

```
gagnnnnnnt aacttacacg cccgcttggt accgagctcg gatccactag taacggccgc      60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactttttt tttttttttt     120
tttttttttac agaaggctgt aaagctttat tgggagaatt ttaatgaaca aatttccaac    180
ataggagcag cctgcatcat ttcaacgtgc cttcttttaa cactgtgatt gcttttcacc     240
ttcttcaggc gttttcacct cctctggatt tggcgggtcc atctcctgcc catcaggacc     300
atcttcacac tcacacccag tctgtgggtg accctgttcc tggctatgag cttcaggctt     360
cggcccttga cctgcanatg ctccctcatc ctctccctcc tgagcagctg caggatcctg     420
acgttgagtt gctggttccc cttcttcagg tgttgctggt tccgcttcat cactgaactg     480
ctcgggccgc ataggcccaa tcatttcagg aggctgnacc tgcccgggcg gccgntcgaa     540
agggcgaatt ctgcagatat ccatcacact ggcggccgnt cgagcatgca tctagagggc     600
ccaattcgcc ctatagtgag tcgtattaca attcactggc cgtcgtttta caacgtcgtg     660
actgggaaaa ccctggcgtt acccaactta atcgccttgc agcacatccc cctttcgcca     720
gctggcgtaa taacgaaaag ccccgcaccg atcgcccttt ccaacagttg cgcancctga     780
aagggcnaaa tggacncccc tggaacggcc attaaccccc gcnggnnnnn gggtaccccn     840
caangngacc ggtacacttg gcaangccct aacgcccggt ccntttgntt ttctttcctt     900
tcnttttngc acgttnnncc gggttttccc ggnaagctnt naaatngggg ggtccccntt     960
tngggtccna ataaggcntt tagggncctt ggnccccnaa aaatttgntt ttnnggggan    1020
ggtc                                                                 1024
```

<210> 78
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 78

```
gnagnnnnnn ttgagtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtacagcct cctgaaatga     120
ttgggcctat gcggcccgag cagttcagtg atgaagcgga accagcaaca cctgaagaag     180
gggaaccagc aactcaacgt caggatcctg cagctgctca ggagggagag gatgagggag     240
catctgcagg tcaagggccg aagcctgaag ctcatagcca ggaacagggt cacccacaga     300
ctgggtgtga gtgtgaagat ggtcctgatg ggcaggagat ggacccgcca aatccagagg     360
aggtgaaaac gcctgaagaa ggtgaaaagc aatcacagtg ttaaaagaag gcacgttgaa     420
atgatgcagg ctgctcctat gttggaaatt tgttcattaa aattctccca ataaagcttt     480
acagccttct gtaaaaaaaa aaaaaaaaaa aaaaaagtac ctcggccgcg accacgctaa     540
gggcgaattc cagcacactg gcggccgtta ctagtggatc cgagctcggt accaagcttg     600
gcgtaatcat ggtcatagct gtttcctgtg tgaaattgtt atccgctcac aattccacac     660
aacatacgag cccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact     720
cacattaatt gcgttgccgc tcactgcccg ctttncagtc gggaaacctg tcgtgccagc     780
tgcattaatg aatcggncaa cgcccccgggg aaaaagcggt ttgcgtattg ggcgctcttc    840
gctttcttgg ttacttgact cnttgngcct tggccgttcg gttgcggnna acggtttcag     900
cttacttcaa angcgggaaa tccggtttc cncggaaatc aggggaatac cccnggaaaa      960
gaacttgtga accnaaaggc ccnccaaaag gcccngnaac cgtaaaaaan ggccccntnn    1020
nntn                                                                 1024
```

<210> 79
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 79
gngnnnnnnt taacnccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gccctttcga gcggccgccc gggcaggtac tgtttttgtc atttgcacca 120
gcttctttct ccaggaaaga tcaaaacgat gcactgcaag gttaacatcc aatttttaat 180
acattgtgat tggtccagat agctgcctta tccaactgcc tcctttggac cacttcatca 240
tgggacagct tgatgcaatc tacttgacaa gaccctggaa ccccacaccc ctcatggaac 300
cagtgtccac ctcccagtca cagtgtgacc ccagggaact cttgcctgct tgctttaaac 360
ccaccactta aaagtctcca cagaaaacct gtttgaatag tacctcggcc gcgaccacgc 420
taagggcgaa ttctgcagat atccatcaca ctggcggccg ctcgagcatg catctagagg 480
gcccaattcg ccctatagtg agtcgtatta caattcactg gccgtcgttt tacaacgtcg 540
tgactgggaa aaccctggcg ttacccaact taatcgcctt gcagcacatc ccccttcgc 600
cagctggcgt aataagcgaa gaggcccgca ccgatcgccc ttcccaacag ttgcgcagcc 660
tgaatggcgg aaatggacgc gccctgtagc ggcgcattaa gcgcgggcgg gtggtggtgg 720
ttacgccgca gcgtgaccgc tacacttgcc agcgccctta cgcccgctcc tttcgctttc 780
ttcccttcct ttttngcacg ttcggccggc ttttcccgtc agctctaaat cgggggctcc 840
cctttagggt tccgaattan tgctttacgg gaccttganc cccaaaaact tggnttaggg 900
gtgagggtca cgtatgggcc attggccctg aaaanacggt ttttcgcccc tttgaccctt 960
ggaatcncgt nnttttaaaa ggggactttg gtcccaactg ggacaacnnt taacccctta 1020
ttng 1024

<210> 80
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 80
gnagnnnnnn ttnnnttgng aattgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtact attcaaacag 120
gttttctgtg gagactttta agtggtgggt ttaaagcaag caggcaagag ttccctgggg 180
tcacactgtg actgggaggt ggacactggt tccatgaggg gtgtggggtt ccagggtctt 240
gtcaagtaga ttgcatcaag ctgtcccatg atgaagtggt ccaaaggagg cagttggata 300
aggcagctat ctggaccaat cacaatgtat taaaaattgg atgttaacct tgcagtgcat 360
cgttttgatc tttcctggag aaagaagctg gtgcaaatga caaaaacagt acctgcccgg 420
gcggccgctc gaaagggcga attccagcac actggcggcc gttactagtg gatccgagct 480
cggtaccaag cttggcgtaa tcatggtcat agctgtttcc tgtgtgaaat tgttatccgc 540
tcacaattcc acacaacata cgagccggaa gcataaagtg taaagcctgg ggtgcctaat 600
gagtgagcta actcacatta attgcgttgc gctcactgcc cgctttccag tcgggaaacc 660
tgtcgtgcca gctgcattaa tgaatcggcc aacgcgcggg gaaaagcggn ttgcgtattg 720
ggccgctctt ncgcttnctn gcttacttga ctcgcttgcg cttcgnccgt tcggcttgcg 780
gcnaagcggt attcagctta cttcaaaggc ggtaaatacn ggtattcccc agaaatcagg 840
gggatnaccc cnggaaaaga acatgtgaan ccaaaaggcc accaaaaagg ncnnggaacc 900
gtnaaaaang gccncnttnn nnctgngttt ttccattaag gttcccgccc ccttgacagc 960
ctttccaaaa attcganncc ttcaaantnc aaagggggcn aaaaccccnc cggggctttt 1020
taag 1024

<210> 81
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 81
gngnnnnnnt taacttacac gccagcttgg taccgagctc ggatccctag taacggccgc 60

cagtgtgctg gaattcgccc tttcgagcgg ccgcccgggc aggtacctca ttagtaattg 120
ttttgttgtt tcattttttt ctaatgtctc ccctctacca gctcacctga gataacagaa 180
tgaaaatgga aggacagcca gatttctcct ttgctctctg ctcattctct ctgaagtcta 240
ggttacccat tttggggacc cattataggc aataaacaca gttcccaaag catttggaca 300
gtttcttgtt gtgttttaga atggttttcc tttttcttag ccttttcctg caaaaggctc 360
actcagtccc ttgcttgctc agtggactgg gctccccagg gcctaggctg ccttcttttc 420
catgtcccac ccatgagccc tccactggac agctcagtaa gcctggccct tcattctgcg 480
ctgtgttctt cctctgtgaa aatccaatac ctcttacctc ctctgcatgc aaagattctc 540
aaggattgtc agacttcaaa cgtaacagca gaaccaccag aaggtcctat aaatgcagta 600
gtgaccttct caagctgtca ggtctttaaa taggatttgg gatttaatgc tatgtatttt 660
taaaggaaag aaataagaag ttgctagttt taaaaatgca tgtcttttaa ccaattcaga 720
atctgccccc aaactttttt naaaagtcaa gacagataaa gctttggggg agacngaaaa 780
aaaaaannnn nnnaaagagt accttnggcc gggaacacgc taangggcaa attctggcan 840
aaatncatta cactgggcgg gcggtttgag cattgcntnt anangggccc aattngncct 900
ataangggggg cgattacaat tncctgggcc gcgttttaaa acgtnngaac tgggaaaanc 960
ctggggtncc cacnttaatg gccttggnga naatccccct tttncccnan tggngnannn 1020
nncn 1024

<210> 82
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 82
gnagnnnnnn ttnngtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg 60
atatctgcag aattcgccct tagcgtggtc gcggccgagg tactcttttt tttttttttt 120
ttttccgtct ccccaaagct ttatctgtct tgacttttta aaaaagtttg ggggcagatt 180
ctgaattggc taaaagacat gcatttttaa aactagcaac tcttatttct ttcctttaaa 240
aatacatagc attaaatccc aaatcctatt taaagacctg acagcttgag aaggtcacta 300
ctgcatttat aggaccttct ggtggttctg ctgttacgtt tgaagtctga caatccttga 360
gaatctttgc atgcagagga ggtaagaggt attggatttt cacagaggaa gaacacagcg 420
cagaatgaag ggccaggctt actgagctgt ccagtggagg gctcatgggt gggacatgga 480
aaagaaggca gcctaggccc tggggagccc agtccactga gcaagcaagg gactgagtga 540
gccttttgca ggaaaaggct aagaaaaagg aaaaccattc taaaacacaa caagaaactg 600
tccaaatgct ttgggaactg tgtttattgc ctataatggg tccccaaaat gggtaaccta 660
gacttcagag agaatgagca gagagcaaag gagaaatctg gctgtccttc cattttcatt 720
ctggtatctc aggtgaactg gtaaaaggga gacatttgaa aaaaatgaaa cnaccaaaac 780
cattactaat gaggtacctg cccnggcngg ccgttcnaaa gggccaattc cacacactgg 840
gcggccgtta cttaatggat ccnaactcgg taccaancnt tgcgtaaatc atgggccnnt 900
actgggttnc ctgggggnaa atggtatncg gttaccaatt ccccccaann ttcganoccg 960
gaancoctta agggtaaanc cctgggggcc ctnaagaggg gctaacttcc catttaaatg 1020
ggtt 1024

<210> 83
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 83
gggnnnnnnt taanttanac gccnnncttg gtaccgagct cggatcccta gtaacggccg 60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg caggtacact taaaattggt 120
gccgagcagg gatataacct gcagttaagt gaaaagaaaa tccagcctcc ccctccaaaa 180

```
aaaaaaaaaa atttaatttt taaaaattag tggtatggca ataagacact tcagaggcta      240
tcttaacctc tgaataccca tcttctagtt taaagacaga gacatcccat ctggaaaatg      300
ttaacttgtg ttgtcatctc gttgccggag taagtagaca taagacagag tttaagaagt      360
aaaaatatag aaaaattttg atggtcacaa tgagataaat attagaatat tactattcca      420
atgattaaat gaggatcttg aaataaattc tgaagtcttc caatttttac atttattgga      480
ggggtccctg agttctgtca actttttat ttaagtctct tgctcttatt ttgtgcataa       540
atgttaaacc ttccaaaaat gaaatgttag ctttctttct tttactttt attaaattta       600
atagaaaata tgacctgagt agttaaaaag tattttgcat tatttgcagt aagatgtctc      660
tagcactgct caaagggcaa attttaaaac ttcagtctgg gtgaaagatt ttgctagttt      720
tacagaaaga tttgctatct taaactcaaa gctggttttt cttttctcaa tgtaagtgac      780
tgggatgctg gcttaagaat tctttccaag gncatgtttg tgaaataaac cttacatgag      840
agctttcctg ncatctacnc ctatatgtgg cctngaggtt gaccaaattt antttagntt      900
ctaagtgtaa nctatcccaa atgggctatc caaatttgaa tggngccctt catactgnga      960
aggaaaaang tggncctngg ccgggaacac ccttangggc caattttgcg anttccntac     1020
aatt                                                                 1024
```

<210> 84
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 84

```
gnagnnnnnn ttgagntngg ccctctagat gcatgctcga gcggccgcca gtgtgatgga       60
tatctgcaga attcgcccctt agcgtggtcg cggccgaggt acagcattat catctcagta     120
tgtagtggca cacattcaaa atcgtataga ccatatgagg atagattaca acttagaaac     180
taaaataaat ttgttcaaca ctccagacaa catatagtgt agatgacagg aaagctctca     240
tgtaatgttt atttcacaaa catgaccttg gaagaattca taagacagca tcccagtcac     300
ttacatgaga aaagaaaaac cagcttgagt ttaagatagc aaatctttct gtaaaactag     360
caaatctttc acccagactg aagttttaaa atttgccctt tgagcagtgc tagagacatc     420
ttactgcaaa taatgcaaaa tactttttaa ctactcaggt catattttct attaaattta     480
ataaaaagta aaagaaagaa agctaacatt tcatttttgg aaggtttaac atttatgcac     540
aaaataagag caagagactt aaataaaaaa gttgacagaa ctcagggacc cctccaataa     600
atgtaaaaat tggaagactt cagaatttat ttcaagatcc tcatttaatc attggaatag     660
taatattcta atatttatct cattgtgacc atcaaaattt ttctatattt ttacttctta     720
aactctgnct tatgnctact tactccggca acgagatgac caccacaagt taacattttc     780
cagaanggat gtctctgnct ttaaactaga aagatgggta tttcagaggg taagaatacc     840
ctctgaagtg gtcttaatgg catacccta atttttaaaa antaaaattt ttttttttt       900
tgggangggg aaggctggat ttcctttcnc ttaacctnga gggtatatcc cctgnttggg     960
acccaatttt aagngnacct ggcccgggcn ggccgttcaa aagggcgaat ttccgcncct    1020
gggc                                                                 1024
```

<210> 85
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 85

```
gngnnnnnnt taacnccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt       60
gctggaattc gcccttttcga gcggccgccc gggcaggtac gcggggagag agaagcgagg     120
ttctcgttct gagggacagg cttgagatcg gctgaagaga gcgggcccag gctctgtgag     180
gaggcaagac acagtgggtc gcaggatctg acaagagtcc aggttctcag gggacaggga     240
gagcaagagg tcaagagctg tgggacacca cagagcagca ctgaaggaga agacctgcct     300
```

```
gtgggtcccc atcgcccaag tcctgcccac actcccacct gctaccctga tcagagtcat     360
catgcctcga gctccaaagc gtcagcgctg catgcctgaa gaagatcttc aatcccaaag     420
tgagacacag ggcctcgagg gtgcacaggc tcccctggct gtggaggagg atgcttcatc     480
atccacttcc accagctcct cttttccatc ctcttttccc tcctcctctt ttcctcctcc     540
tcctcctgct atcctctaat accaagcacc ccagaggagg tttctgctga tgatgagaca     600
ccaaatcctc cccagagtgc tcagatagcc tgctcctccc ctcggtcgtt gcttcccttc     660
cattagatca atctgatgag ggctccagca gccaaaagga agagaagtcc cagcacccta     720
caggtcctgc cagacagtga gtctttaccc agaagtgaga tgatgaaaag gngactggat     780
tnggtgcagt ttctgntntt taagtntcaa atgaanggaa ccgatcncaa anggccgaaa     840
tncttggaaa agtgncntna aaaaattatg aagaacnntt tcccttggng gttaangaaa     900
cccctccaan gcnngcnngn nggnctttgg gcnttgangn nnaanggnaa gggatccccn     960
ttgggccnnt tcntttggcc ttggnnncct ncctngggcc ctancttnng aaggggaanc    1020
cnnn                                                                 1024
```

```
<210> 86
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 86
gnagnnnnnn ttnngtttcn gaattgggcc ctctagatgc atgctcgagc ggccgccagt      60
gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac tccaggtagt     120
tttcctgcac ccaatcttgg gtgagcagct tcctgggctc cccataaatg aggtgctcca     180
tcccatcata cagccccatc atattcagtg cttcccagat gacctcctca ggggtgcagt     240
agccctctat gaagattatg cttaggataa gtatgagaat gccagtcttg ggcatgctct     300
ggacatcact cagcatccca tcataggtga ggcccaggga ggtgacaagg acaaaggagt     360
ggccagtggg atccacttcc tttacatcaa tgccaaagac cagcagcatg cactcggagg     420
cttcactaaa caacaaaggg aagtggtctt cataattttt tatgacactc tccagtattt     480
ctgcctttgt gatcggctcc ttcatttgat acttgaagag cagaaactgc accaaatcag     540
tcaccttttc atctatctca cttctgggta aagactcact gtctggcagg acctgtaggg     600
tgcttggact ctcctccttt tggctgctgg agccctcatc agattgatct aatggaaggg     660
aagcaacgac cgagggggag gagcaggcta tctgagcact ctgggggagg aattggtgtc     720
tcatcatcag cagaaacctt ctctggggtg cttggtatta gangatacag gaggaggagg     780
angaagaaga ngaagaagga aaagaggatg gaaaagaagg actgggtgga aatggatgat     840
gaagcatnct tcttcacagc ccaggggaac ctgtgcaccc ttnaagggcc tggggcttac     900
ttttgggaat tgaagaactt ntttaggcnt gccanngntt taccctttg ganccttnag     960
ggcctnaagn acctttganc angggnnncn nnnnnnngga attgggcncg gaaatttggg    1020
ccna                                                                 1024
```

```
<210> 87
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 87
gggnnnnnnt taactcatac gccagcttgg taccgagctc ggatccctag taacggccgc      60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtacattgag accagcaata     120
gttccagcat ctttggtagc ctgacgctga gagtcattaa agtaagctgg cactgtgacc     180
acagcattgg taacagtctt cccaaggtag gcttctgcaa tttccttcat ctttgtcaga     240
accatagaag acacctcctc tggatagaag cttttggtct ctcccttgta ttctacttgg     300
accttgggcc tgccagcatc attcaccacc ataaagggcc aatgtttcat atcagactgg     360
acaacagcat catcaaatct gcgtccaatc agacgtttgg catcaaaaac tgtgtcggtg     420
```

gggttcattg caacttgatt ctttgcggca tcaccgatca accgttcagt gtccgtaaag 480
gcgacatagc ttggagtggt tcggtttccc tgatcattgg caattatctc gacttttccg 540
tgctggaaaa cacccacaca agagtaggtg gtgccaagat caataccaac tgcaggtccc 600
ttggacatgg ttgctgggat gtaggcctgg ctccaataac gaaggaagcc acaaaaaccc 660
aagagctgca ggcgaagtcc aatgagaccc cccgcggacc tgcccgggcg gccgctcgaa 720
agggcgaatt ctgcagatat ccatcacact ggcggccgnt cgagcatgca tctaganggc 780
ccaattcgcc ctataagnga gtcgnattac aatcacttgg ccgcgtttta caacgtcgtg 840
acttgggaaa accctggggt acccaactta atcgncttgn agcacaatcc ccntttnncc 900
anctggcgga antnaccnaa aaggcccgna ccgaacggcc ntttccaaaa gttgcncaan 960
cctgaaangg caaaaggacc ccccccttta acggggccat taaacccccn ncngggnnnn 1020
nngg 1024

<210> 88
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 88
gnnnnnnttn ngattgggcc ctctagatgc atgctcgagc ggccgccagt gtgatggata 60
tctgcagaat tcgcccttcg agcggccgcc cgggcaggtc cgcggggggt ctcattggac 120
tcgcctgcag ctcttgggtt tttgtggctt ccttcgttat tggagccagg cctacatccc 180
agcaaccatg tccaagggac ctgcagttgg tattgatctt ggcaccacct actcttgtgt 240
gggtgttttc cagcacggaa aagtcgagat aattgccaat gatcagggaa accgaaccac 300
tccaagctat gtcgccttta cggacactga acggttgatc ggtgatgccg caaagaatca 360
agttgcaatg aaccccaccg acacagtttt tgatgccaaa cgtctgattg gacgcagatt 420
tgatgatgct gttgtccagt ctgatatgaa acattggccc tttatggtgg tgaatgatgc 480
tggcaggccc aaggtccaag tagaatacaa gggagagacc aaaagcttct atccagagga 540
ggtgtcttct atggttctga caaagatgaa ggaaattgca gaagcctacc ttgggaagac 600
tgttaccaat gctgtggtca cagtgccagc ttactttaat gactcttcag cgtcaggcta 660
ccaaagatgc tggaactatt gctggtctca atgtacctcg gccccgngacc acgctaaggg 720
cgaattncag cacactggcc ggccgntact taatggatcc gaactcggta ccaagccttg 780
cgtaatcatg gnccatactg gttnctgngg tgnaattggt attccggtca caattncnca 840
caacattcca anccggaagc cttnagtgta aagccctggg tgcccttaag agtgagctta 900
ctnncantta aatgcgttgc gcttnnttgg ccgttttcca tcgggnaaan ctgcngccaa 960
ctggatttaa ggaattggnc aanncccccgg ggaaaaaagn gtttggtatg gcgcttttnc 1020
gttt 1024

<210> 89
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 89
gggnnnnnnt taaactccag cttggtaccg agctcggatc cctagtaacg gccgccagtg 60
tgctggaatt cgcccttgag cggccgcccg ggcaggtaca gttcagtaat gttaagtgta 120
ttcacagtgc tgtgcaaaac atttctatct tgcaaaaccg aagttctata tccactaaac 180
aactccgcat tttccctctc cccagcccct gccaactgcc attctacttt ctgtttctct 240
atatttgact acactagaca cctcatacaa gttaaatcag agagtatttg tttttttgtg 300
actggtttct ttaaacttag cataacatcc tcaagatcca tcaatagtct atcatgtatc 360
atgtattact tctttttttaa ggttgaacaa tattccactg tgtgtgtgtg tgtgcacgtg 420
tataccacgt tttgtttagc cattcgtcca tcaatggaac ttgggttgct tcgacccttt 480
ggctactgta ttacgttgtt ctagcattgc tataaagacc tgaggttggg taatttataa 540

```
agaaaagaag ttctgcaggc tatacaagca tggtgctggc atctgcctgg cttctgggga      600
ggcctcaggg accttttact catggtggaa ggtgaggcag gagcaggcat gccacatggt      660
gaaagcagga gcaagaaaga gtggggaggg tgccatcact taaaaaacca gatcccatga      720
gtattcatta ttgcaagaac agcatcaaac catgaggctt cancccgtgg cccaaacacc      780
ttccaacang ccccaactcg cattaaggat acctttcnaa nntaagggtt ggggggggacc     840
aaatntccca actatatcan tgnttttgaa cagggnctcc agttctttta aatcccgaaa      900
aaatttttaa aggantccca acccttttaa ngaactaaag gtttcccgna nnnngaaaag      960
tttttnnccc ngggggnaaa attnaatgnn tttncccnaa aaantaantt ttnaaagaaa     1020
nttt                                                                  1024
```

<210> 90
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 90

```
gnagnnnnnn ttnngttncg aattgggccc tctagatgca tgctcgagcg gccgccagtg       60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgcggtaca tctcctaaag      120
actaatggtc atttacaaat tcaaacatga gataaagtat ttggtgatat gtccatcaag      180
tataactcag aaatcagtaa acaagtcttt tcccaaagta agttccttct aaatgtagct      240
aaaaagagcc actttgtcat taaagtgaat gagtatgcat ttttagaaca gacttgatgt      300
ttggattgtg ttaaacatat gtctgttagt gaaagtgtta gtcacaaaga taaaatttca      360
tctaaaaata atatatagag aaaaatgcaa taaatataca catggtaaaa tacttctctt      420
ttctgtaaac ttttagttct ttataagggt tgtgatatca tttaaaaatt tttctgtatt      480
gaaagaaact ggagacactg ttcatagcag ctgatatagt ttggatattt gtccccaccc      540
aaaccttata ttgaaatgta atccttaatg cggaggtggg gcctggtggg aggtgtttgg      600
gccacggggg tggagcctca tggtttgatg ctgttcttgc aataatgaat actcatggga      660
tctggttttt aaagtggatg gcaccctttc ccactctctc ttgctcctgc tttcaccatg      720
tggcatgcct gctcctgcct caccttcacc atgagtnaaa ggncctgang cctcccagaa      780
gccangcaga tgccancanc attgcttgga tagcctgcan aacttctttt ctttataaaa      840
taccccaacc tnaggcntta tgccatgctt gaacaaccgt aatncntanc ccaanggtcn      900
aaccaaccca ggtccattgg nngggcnaag gnttaacnaa acgnggnntc ccntgcncna      960
nnnnccccn ggggnaaatg gcaacccttn aaaanaagnn tncctgganc cngnnnnncc     1020
nttt                                                                  1024
```

<210> 91
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 91

```
gggnnnnnnt aattancgcc ngcttggtac cgagctcgga tccctagtaa cggccgccag       60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta ccttggaagt tatgtcatta      120
atataggctg gttcatcaaa taaagcaaaa ccttgcaata tcagctagat ttacactccg      180
ggacgttgcc caaaggtagg aagaaagcag agggaaatat ttcagtcatc atttccaaag      240
tcattatcaa aatctgtgag gaagtttaat cttccaaaga gtcaatgtca gacatcaggc      300
ctctgttgcc tgcttctctc gaggcactag attaggagtc ttcaataaga gacttaacat      360
gaggtatatg gaagatgagg caccgagata agttcatcat taggtgtgag cactgctcac      420
ccttgctggc aagttctcct taagggcctg aagcacaggt gtccaaagaa aagcgttaag      480
tccatcttaa tagaatctat gtggtatatg atgtggtcag cccctggtct gtgatcagca      540
agaacctaca gcacagatta tgccctgccc acttcaatga atacctactc tcctccattc      600
tccatcactt tttttgctat caagaactcc ggaccttgcc catgggagaa gtttagagag      660
```

```
gaactcttgt ggagaactgg tttattttct gccctgtgcc gacgagtttc agctggccaa     720
gaaaggagtc aagttattaa aaagcatcac aatggagatc ttccaggctg ggttttttgg     780
tttttggtgg taaaactggg ggaaangggg actatttatt ctggccttaa atcaatnggc     840
aaattaagtc aagaagaccn ttttgggaat gtngactatg gatnccctcc taatngaatg     900
gagnagcctt aaaaaggggg caangtaang gttttcnggt atggaagcca aaanttttnc     960
cggctnaatg ggntggntnn ccaatattnn taccggcccn aaangggnnt tttncnnngg    1020
gtcc                                                                 1024
```

<210> 92
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 92

```
nngnnnnnnt tnngantggg ccctctagat gcatgctcga gcggccgccc gggcaggtac      60
tgcatccata atttatcgcc atgtgcaaca gctttgcgtt ttctaaggca caatttttaa     120
tgaaatgatg tgtagatttc aatctaataa cagctcatcc aaatgacaaa tatggtcgaa     180
atccctccag tggctgagga aatttctgca cctatatgga acccacatgc aaagaaccca     240
tctagcatgt aataaataat cgctagccat actcaataag acacggaaaa attattgctt     300
acataacaga aaaacatcta cttgaccccc ttttatgact acatcaatct attaggagtg     360
tatccatagt ctacattcac aaaatgtcat cttgacttat ttgccattga tttaaggcag     420
aataaatagt cccccttccc ccagtcttaa caacaaaaaa caaaaaacca gcctggagat     480
ctacattgtg atgcttttta ataacttgac tcctttcttg gccagctgaa actcgtcgca     540
cagggcagaa aataaaccag ctctccacaa gagttcctct ctaaacttct ccatgggcaa     600
ggtccggagt tcttgatagc aaaaaaagtg atgggagaat ggaggagaag taggtattca     660
ttgaagtggg cagggcataa tctgtgctgn aggttcttgc tgatcacaga ccaagggctg     720
accacatcat ataccacata gattctatta agaatggact taacgctttt ctttggacac     780
ctgtgcttta ngccctttaa ggagaacttg ncanccangg gtgagcagtg cttcacacct     840
taaggatgaa ccttaatctc ggggcctcat cttccatata nccctaaggg taagnctctt     900
taatggaaga ctcctnaatt agnggccttg aaaagaagca ggcacccgaa gggcctgagg     960
ctgacattgg ctcttttnga agaataaact ttccttaccg naatttggaa aaggaccttt    1020
ggaa                                                                 1024
```

<210> 93
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 93

```
gngnnnnnnt taactccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttcaaatgt cactgaaaga     120
attgtttttg taacagtatg caaaatgata ctgtattgtt agaacaaaaa tctgtggagt     180
gttaatactt tgtaagccaa attaaagttt ctaagcagta taaaatgaga atgacatcat     240
cctttcctag tatttccaag tcttagagta ctctacaccc tgttggctat ttatctgggg     300
ttagacttct ggagactttt cagatagact tgaagtctct ggccttgcct gggaattact     360
ggctgcccaa ggaagcactg gagaaggcgg tggtctcctt gcccttgtgg tcctgctgtg     420
gcgcattttg attgagttcc tggttcggct ggtcagagtg gctggatagt gttggcccac     480
tccattcctc aggttttttt gaagcggtgg tcttttaggg agagcctttt gttcctggaa     540
cttccttgac gggtcccttt tcccttctgg gttgtcttgg gaacctcttt ggtgttgatg     600
ggttgttgtt ggaaaatggg ctggaggctc gtggtttcct ggacatcttc accagaccag     660
tgtctctcaa cagtctactc cagtccacct ggtctncccg agcttcccca ggacagtgaa     720
ngcaggccac aggctanaaa ctgtagtcnc ccgacattac aagccaattt gggnctgtgg     780
```

```
gctctgnttt ccaaatcaac cctttcanct tcatttggaa ncccattcag gaaanccccg     840
cgtaccttgc ccgggcgggc cgttcnaaag ggcgaattct gcanaaatcc cttanacttg     900
ggnggnccgt ttnaacctgc cttttaaagg gcccaattnn nccctntnna nnggagcgan     960
taccaattnn ntnggnccgc gttttnaaaa cgnnnnnann tnggnaaaan ccctggggtn    1020
cccc                                                                 1024
```

<210> 94
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 94

```
ttnngaattg ggccctctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca      60
gaattcgccc ttcgagcggc cgcccgggca ggtacgcggg gcttcctgga tggggatcca     120
gatggaggtg gagggttgat ttgggaagca gagcacagca gcacaaattt gcttgtaatg     180
tcggcgacta cagtttctag cctgctggcc tgccttcact gtcctggggg aagctcgggg     240
agaccaggtg gactggagta gactgttgag agacactggt ctggtgaaga tgtccaggaa     300
accacgagcc tccagcccat tttccaacaa ccacccatca acaccaaaga ggttcccaag     360
acaacccaga agggaaaagg gacccgtcaa ggaagttcca ggaacaaaag gctctcccta     420
aaagaccacc gcttcaaaaa aacctgagga atggagtggg ccaacactat ccagccactc     480
tgaccagccg aaccaggaac tcaatcaaaa tgcgccacag caggaccaca agggcaagga     540
gaccaccgcc ttctccagtg cttccttggg cagccagtaa ttcccaggca aggccagaga     600
cttaagtcta tctgaaaagt cttccagaag tctaacccca gataaatagc cnaacagggt     660
ggagagtact tctaagactt ggaaatctta ggaaagggat gatgtcantc tcattttata     720
ctgnttaaaa actttaantt ggcttacaag tattaaccct tcacagaant ttgtctacca     780
tncagnatca atttggcatc tggtccaaaa ccattttttt agggcanttt gaaaagtcct     840
tnggccggga acaccttaag ggcgantcca gncacttggg nggncgtnan nnnaaggtcc     900
caactcgnnc caaannttgn gnaaacatgg gnnnanatgg gntcctgggg ggaaatgtat     960
ccgnttacaa nttcccncaa nntncnaanc cggannncnt taagggtaaa nnccctgggg    1020
gccc                                                                 1024
```

<210> 95
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 95

```
gggnnnnnnt taactccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gccctttcga gcggccgccc gggcaggtac tttttttttt tttttttttc     120
cgtctcccca aagctttatc tgtcttgact ttttaaaaaa gtttgggggc agattctgaa     180
ttggctaaaa gacatgcatt tttaaaacta gcaactctta tttctttcct ttaaaaatac     240
atagcattaa atcccaaatc ctatttaaag acctgacagc ttgagaaggt cactactgca     300
tttataggac cttctggtgg ttctgctgtt acgtttgaag tctgacaatc cttgagaatc     360
tttgcatgca gaggaggtaa gaggtattgg attttcacag aggaagaaca cagcgcagaa     420
tgaagggcca ggcttactga gctgtccagt ggagggctca tgggtgggac atggaaaaga     480
aggcagccta ggccctgggg agcccagtcc actgagcaag caagggactg agtgagcctt     540
ttgcaggaaa aggctaagaa aaaggaaaac cattctaaaa aacaacaaga aactgtccaa     600
atgctttggg aactgtgttt attgcctata atgggtcccc aaaatgggta acctagactt     660
cagagagaat gagcagagag caaaggagaa atctggctgc cttccatttt cattctgnta     720
tctcaggtga actggtanan gggagacatt ngaaaaaaat gaaacnacca aaaccattac     780
taatgaggta ccttnggncc gggaacacgc ttaaggcgaa ttttgcagaa atncattaca     840
ctggcggncc gttcagcatg cttttaaagg gcccaattnc cctttaaggg agtcgnatta     900
```

caatttnant gggccgcgtt ttacaacgtn nggaactggn aaaacccctg gggtnnccca 960
cttnaannnc cttggnnnan aatccccttt tnccnaantg gggnnnnnnn ccaaaggccc 1020
cnna 1024

<210> 96
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 96
gngnnnnnnn tnngttncga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg 60
atggatatct gcagaattcg cccttagcgt ggtcgcggcc gaggtacctc attagtaatt 120
gttttgttgt ttcatttttt tctaatgtct cccctctacc agctcacctg agataacaga 180
atgaaaatgg aaggacagcc agatttctcc tttgctctct gctcattctc tctgaagtct 240
aggttaccca ttttggggac ccattatagg caataaacac agttcccaaa gcatttggac 300
agtttcttgt tgtttttag aatggttttc ctttttctta gccttttcct gcaaaaggct 360
cactcagtcc cttgcttgct cagtggactg ggctccccag ggcctaggct gccttctttt 420
ccatgtccca cccatgagcc ctccactgga cagctcagta agcctggccc ttcattctgc 480
gctgtgttct tcctctgtga aaatccaata cctcttacct cctctgcatg caaagattct 540
caaggattgt cagacttcaa acgtaacagc agaaccacca gaaggtccta taaatgcagt 600
agtgaccttc tcaagctgtc aggtctttaa ataggatttg ggatttaatg ctatgtattt 660
ttaaaggaaa gaaataagaa ttgctagttt taaaaatgca tgtcttttaa ccaattcaga 720
atctgccccc aaactttttt naaaagtcaa ggaccgataa agctttgggg agacngaaaa 780
aaaaaannnn aaaaagtacc tgcccgggcn ggccgttcna aagggcgaaa ttcaacacac 840
tgggcggccg gtacttaatg gatcccaact cggncccaac cttggggaaa ncatgggccn 900
taactgggtt cccgggggggn aaatggtatt ccggttacaa attcccccccc annttccana 960
cccggaaanc cnttaagggt aaaanccctg ggnggcccna angggggggct nacctcccct 1020
tnaa 1024

<210> 97
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 97
gnngnnnnnn nttnnnttat acgccangct tggtaccgag ctcggatccc tagtaacggc 60
cgccagtgtg ctggaattcg cccttagcgt ggtcgcggcc gaggtacatc tgatttttata 120
tgttgtccaa actggtcaat ccagttgctt aacacagaaa gcggacagat gatcagtgtt 180
gttcttggtc tctcctcaac atcagttttc tttgacccct ccactgcaca agctcccttt 240
ttcaacattt tctttttttgt tgtaggaaca gatgaagtta atgcacatgc aaatgccaca 300
tcttctataa ccttagaaga tcctttcgcc ctgcctttag tttcagactg tacagaggga 360
gagagagaga gaaagagagc acgccagtga gaaagcgagc gcgagcgcga gcgcaagggg 420
aggagagggt gggagagggc ggaaggggga aagctgtccg tgggagattg tgtcttcatg 480
tccacggggc tgcatctctt gatggtgcac tgaaaaagca gagctcacca gacagagtgg 540
aaaggcaggg ggagggggcag ggagcaacag aaggaagaga caacaagccc aagacagctt 600
ccatctcaga cggaaggccc ccagaagata gaattccagc cgactgaaaa accacccaat 660
gaacaaagaa gattctagaa aatagaagtg ttgggattac aaagttgngc gtttcatcgg 720
tacctgcccg ggcggncgnt caangggcga attctgcaga tatccatcac actggcggnc 780
gntcgagcat gcatntagan ggcccaantc gncctataag ggagtcgnan tacaattcac 840
ttgggccgcg ttttacaacg tctgacttgg naaaanccct gnggttnccc aacnttaaac 900
ggcnttggag nacaattccc ctttttncca anntggggna antnaccaaa agggccccnn 960
accgatggnc cttttncaaa aagttgggcc aaccttgaaa gggcaaaagg gccccccccct 1020

ttaa 1024

<210> 98
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 98
gnngnnnnnn ttnngaatgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg 60
atatctgcag aattcgccct tgagcggccg cccgggcagg taccgatgaa acgcgcaact 120
ttgtaatccc aacactttct atttctaga atcttctttg ttcattgggt ggtttttcag 180
tcggctggaa ttctatcttc tgggggcctt ccgtctgaga tggaagctgt cttgggcttg 240
ttgtctcttc cttctgttgc tccctgcccc tccccctgcc tttccactct gtctggtgag 300
ctctgctttt tcagtgcacc atcaagagat gcagccccgt ggacatgaag acacaatctc 360
ccacggacag ctttccccct tccgccctct cccaccctct cctccccttg cgctcgcgct 420
cgcgctcgct ttctcactgg cgtgctctct ttctctctct ctctccctct gtacagtctg 480
aaactaaagg cagggcgaaa ggatcttcta aggttataga agatgtggca tttgcatgtg 540
cattaacttc atctgttcct acaacaaaaa agaaaatgtt gaaaaaggga gcttgtgcag 600
tggaggggtc aaagaaaact gatgttgagg agagaccaag aacaacactg atcatctgtc 660
cgctttctgt gttaagcaac tggattgaca gtttggacaa catataaaaa tcagatgtac 720
ctcggncgcg accacgctta gggcgaattn cagcacactg ggcggccgtt acttaatgga 780
tccgaactcg naccaagcct tgcgtaaaca tgggcaatac tggnttcctg nggggaaatg 840
gtaatccggt tacaaattcc ccacaacntt acaanccgga agcccttaag ngtaaaaccc 900
ctgggngccc caaagagtga gctaacttnc catttaaatg cgttngctca atggcccgtt 960
ttccatcggg naaaacctgn ngccantgga ttaangaatc ggncaaancc cccggggnaa 1020
aaan 1024

<210> 99
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 99
aacgccagct tggtaccgag ctcggatccc tagtaacggc cgccagtgtg ctggaattcg 60
cccttcgag cggccgcccg ggcaggtaca gataaatccg tgcatgcatt gagggagact 120
agagggtaaa atgaaatctg ccccatcctt cttacataca cagtgatagc attttgaatt 180
gttcttctac atttgaaatc ttagctgaaa gatcatcagc caccgacctt ttgtgaagct 240
agttctctag aacatacaat gtttttttaaa aaattaaaaa cacagaagga aaaaagcaag 300
aaccaacgat aaatggagct tgtgcagaat ctggcagtgc tgtggacctg cccatctgtt 360
ctcccccgcg tactgactga acacactccc cgctttggtt cctgtaggac gggtgagata 420
ccacaccttg gcaaccacca gtaaaggctc atagtctagc ccttgggagg ccccgatttt 480
agggctgtgc tcggaggcga cctacgttag ggactgggag aagcgggtac ctcggccgcg 540
accacgctaa gggcgaattc tgcagatatc catcacactg gcggccgctc gagcatgcat 600
ctagagggcc caattcgccc tatagtgagt cgtattacaa ttcacttggc ccgtcgtttt 660
acaacgtcgt gactgggaaa accctgccgt tacccaactt aatcgccttg cagcacatcc 720
ccctttcgcc agctgcgtaa taacgaaaag cccgnaccga tcgccctttc cacagttgcg 780
caacctgaat ggcnaatgga cccccccttg taccggcgca ttaaccnccn gccggntnnt 840
ggggtacccc cacgtggacc ggttcacttg gccagggccc taangnccgg ttcntttggt 900
ttcttncctt ccnttttttng cccgttngcc nggtttttcc cgtaagcttt taaanngggg 960
gcttcccctt ttangggtcc aaataangct ttacgggncc tttaaccccc aaaaaaattt 1020
nnnt 1024

<210> 100
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 100
```
gggnnnnnnn ttnngttcng aattgggccc tctagatgca tgctcgagcg gccgccagtg      60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtacc cgcttctccc     120
agtccctaac gtaggtcgcc tccgagcaca gccctaaaat cggggcctcc caagggctag     180
actatgagcc tttactggtg gttgccaagg tgtggtatct caccccgtcct acaggaacca    240
aagcggggag tgtgttcagt cagtacgcgg gggagaacag atgggcaggt ccacagcact     300
gccagattct gcacaagctc catttatcgt tggttcttgc ttttttcctt ctgtgttttt     360
aattttttaa aaaacattgt atgttctaga gaactagctt cacaaaaggt cggtggctga     420
tgatctttca gctaagattt caaatgtaga agaacaattc aaaatgctat cactgtgtat     480
gtaagaagga tggggcagat ttcattttac cctctagtct ccctcaatgc atgcacggat     540
ttatctgtac ctgcccgggc ggccgctcga aagggcgaat tccagcacac tggcggccgt     600
tactagtgga tccgagctcg gtaccaagct tggcgtaatc atggtcatag ctgnttcctg     660
tgtgaaattg ntatccgctc acaattccac acaacatacg agcccggaag ccataaagtg     720
tnaaagccct ggggtgcctn atgagtgagc taactcacat ttaattgcgt tgcgctcact     780
ggcccgnttt cagtcgggaa aactgcntgc cactgcttaa tgaatcggcc acgccccggg     840
gaaaaagcgn ttgcgtantg ggcgctnttc cgctttcttg gttaactgac tcnttgggct     900
ttggccttng gnttnnggnn aacgggttna acttncnttn aaangggggn naatccggtn     960
tnccccgaaa nncggggata acccccggaa anaactttgn ccnaaaggcc cccnaaangg    1020
cccn                                                                 1024
```

<210> 101
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 101
```
gggnnnnnnt tgaatnacac gccagcttgg taccgagctc ggatccctag taacggccgc      60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtacgcgggt atttcttaa      120
atttcttgaa tgttctttat ggtagtgtta ctaaaaagtt tatgatcaca ttttcattgt     180
gaacataatt tgaactcatt atcacacact tggaaaatac agaaaagtgg aggaaaaaaa     240
atcatatccc caccatccaa agacatatac tctcctctta tcttgttcat tcttgtttct     300
gtgcacaggt ttatgattat aactgtgtca aaatgtatat tcaaaatagc tgttacatta     360
cctttgtgga attatggtta aatactttca ctttaatttt ttcaaatgtt ccctataata     420
atgttctgat aacagtgtat tatgtgtgtc tccattggtg tgcataatac atacccagag     480
gaaaaattag aaaataaagt aaattatttt aaaaaattac ctatattccc aacacctaac     540
aactactgct aacatcttga tctgtttcct ctatcttgtt tcagtgcaca cgcttgtgat     600
aacagtgtta aatatgtgtg cataaagtct taaatgaaaa gatgtggaaa ataactaaaa     660
tagtgttgtc attgtgggaa tttggttaaa tattttgtct caaattcctt aaataatctt     720
tggtgttttg gtaataaatt ttaatgatgt attttccatt acaaatataa tacatactca     780
tacaaaactt tggaaaatta gtaaagaaaa ttcacacata ttcccacacc caacaccaat     840
ttaactggtn accatctgga ctngcncta agctgggatt antttaggng tagtggataa      900
gtatgcctaa aggccaaaaa tgggaagaag gatgaaaanc cngaaaatan ttnccctggt     960
gtnnggggaa taaggggaat ttgggttcgg ttcctttgaa agggcatnnn tttcaagggg    1020
tttg                                                                 1024
```

<210> 102
<211> 1020

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 102
```
ggagnnnntt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttcga gcggccgccc gggcaggtac tctttctctc ccctcctctg     120
aatttaattc tttcaacttg caatttgcaa ggattacaca tttcactgtg atgtatattg    180
tgttgcaaaa aaaaaagtgt ctttgtttaa aattacttgg tttgtgaatc catcttgctt    240
tttccccatt ggaactagtc attaacccat ctctgaactg gtagaaaaac atctgaagag    300
ctagtctatc agcatctgac aggtgaattg gatggttctc agaaccattt cacccagaca    360
gcctgtttct atcctgttta ataaattagt ttgggttctc tacatgcata acaaaccctg    420
ctccaatctg tcacataaaa gtctgtgact tgaagtttag tcagcacccc caccaaactt    480
tatttttcta tgtgtttttt gcaacatatg agtgttttga aaataaagta cctcggccgc    540
gaccacgcta agggcgaatt ctgcagatat ccatcacact ggcggccgct cgagcatgca    600
tctagagggc ccaattcgcc ctatagtgag tcgtattaca attcactgcc cgtcgtttta    660
caacgtcgtg actgggaaaa ccctgcgtta cccaacttaa tcgccttgca gcacatcccc    720
ctttcgccag ctggcgtaat aacgaaaagc ccggaccga tcgccctttc caacaggtgc     780
gcaacctgaa tggcgaaatg gacccccccct ggaaccggcg cantaaaccc ccgncgggnn   840
nntngggtac cccccacggg ganccgttca cttggccann gccctaangn cccgttcctt    900
tnggtttctt tccttccttt ttgcccgttt gnccgggttt tcccggnaag ctttaaaaac    960
gggggcctcc ccctttangg gtccnaataa nggcttttac gggnccttng aaccccaaan   1020
```

<210> 103
<211> 1021
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1021)
<223> n = A,T,C or G

<400> 103
```
ggagnnnttn ngnngggccc tctagatgca tgctcgagcg gccgccagtg tgatggatat     60
ctgcagaatt cgccccttagc gtggtcgcgg ccgaggtact ttattttcaa aacactcata  120
tgttgcaaaa aacacataga aaaataaagt ttggtggggg tgctgactaa acttcaagtc    180
acagactttt atgtgacaga ttggagcagg gtttgttatg catgtagaga acccaaacta    240
atttattaaa caggatagaa acaggctgtc tgggtgaaat ggttctgaga accatccaat    300
tcacctgtca gatgctgata gactagctct tcagatgttt ttctaccagt tcagagatgg    360
gttaatgact agttccaatg gggaaaaagc aagatggatt cacaaaccaa gtaattttaa    420
acaaagacac tttttttttt gcaacacaat atacatcaca gtgaaatgtg taatccttgc    480
aaattgcaag ttgaaagaat taaattcaga ggaggggaga gaaagagtac ctgcccgggc    540
ggccgctcga aagggcgaat tccagcacac tggcggccgt tactagtgga tccgagctcg    600
gtaccaagct tggcgtaatc atggtcatag ctgnttcctg tgtgaaattg gtatccgctc    660
acaattccac acaacatacg agcccggaag cataaagtgt aaagccctgg ggtgcctaat    720
gagtgagcta actcacatta aatgcgttgc gctcactggc cgctttncag tccgggaaac    780
ctgtcgtgcc agctgcatta atgaatccgg ncaacgcccc ggggaaaaag cggttgcgta    840
ttgggcgctc ttncgctttc ttggttactg gctccttgng cctcggccgt tccggnttcg    900
gnnaaccggt atcagcttac ttcaaangcg gnaaatccgg tttnccccnga aatccggggg   960
ttaacnccag gaaaanaacc tttgaaccna aagggccccn aaaagggccc ggaaccctaa   1020
a                                                                   1021
```

<210> 104
<211> 1017
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1017)
<223> n = A,T,C or G

<400> 104
```
ggagnnntta atcnacgccn gcttggtacc gagctcggat ccctagtaac ggccgccagt      60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac tcagctgtct taataggatg     120
aagccttaag cagtggaaat ttcagttatt ttccacagta ttccattttg gaggatttgg     180
ggtgtttact ttttaaattc ttgaacaact taacctccat gaggctttgt gaagtcagct     240
gtgaccaccc tcctcttact gtgttctcag tattcattca cttccaggga agaatgacag     300
ccacagggag atggtggtgg gcaagaatga gagtcccagg atccagattt agcctcagat     360
cttccccatt caggaagggt tttccattta acaagagcac tagtatgaaa acattaggga     420
caaatctccc atgtctttga aattcggatt ctcctcttga gatccccttc ctcacctgcc     480
aatcaacttt ataaggccac aagtggtcac tggttttcct tccacaggtt tgaggttctc     540
agctttcctt aagcgaccca gcagctccgc tgttttcaga gtgaatatgt taagctttga     600
tgagattcta ttttcagtaa gttagtgctt ctgggacact tggagaaagc tgtgagagtc     660
attggctacg caaagaacaa cgaaagctga tcctaaaagt gatccaatct aagaaaatgg     720
taaaacgagc tctggccaca gcacagaatt ttatgtgang aactcagatt tttgaagact     780
taacaattgc agaaaaaggn tgcagcctgn acacccatag cccaactttt ntgagccana     840
ctttgggttt tgggnggggа cntggcacca tgtttgnacc tggccggccg gnccgttcna     900
aagggccaaa ttntggcnga aatnccttac actggggggc cgtttgagca tgcctntaaa     960
ngggcccaan tngnccctta aaggggggcn nnttccaatt nnctgggccc ggttttn       1017
```

<210> 105
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 105
```
ggagnnnntt nnntnnngan tgggccctct agatgcatgc tcgagcggcc gccagtgtga      60
tggatatctg cagaattcgc cctttcgagc ggccgcccgg caggtacaaa catgtgccac     120
gtcaccacac aaaaccaaag tctgctcaga gaggtgggct atggtgtgca ggctgcaacc     180
tttctctgca attgttaagt cttcaaaaat ctgagttcct cacataaaat tctgtgctgt     240
ggccagagct cgttttacca ttttcttaga ttggatcact tttaggatca gcttcgttgt     300
tctttgcgta gacaatgact ctcacagctt tctccaagtg tcccagaagc actaacttac     360
tgaaaataga atctcatcaa agcttaacat attcactctg aaaacagcgg agctgctggg     420
tcgcttaagg aaagctgaga acctcaaacc tgtggaagga aaaccagtga ccacttgtgg     480
ccttataaag ttgattggca ggtgaggaag gggatctcaa gaggagaatc cgaatttcaa     540
agacatggga gatttgtccc taatgttttc atactagtgc tcttgttaaa tggaaaaccc     600
ttcctgaatg gggaagatct gaggctaaat ctggatcctg ggactctcat tcttgcccac     660
caccatctcc ctgtggctgt cattcttccc ctgaagtgaa tgaatactga gaacacagta     720
aggaaggagg gtggtcacaa gctgacttca caaagcccta atgganggtt aagttggtca     780
agaatttnaa aagtaacccc cccaaatcct ccaaaaatgg gaatactggt ggaaaataac     840
ctggaaattn ccctggttta aggcttcatt ctattaagac cgcttgagta cccttggccg     900
ngaaccccct taagggcgaa ntncaacaca ctgggngggc cggtacctaa nggatcccaa     960
ctnggnaccc aancnttggg gaaancatng ggccataact gggttcccgg ggggaaatgg    1020
taat                                                                1024
```

<210> 106
<211> 1007
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1007)

<223> n = A,T,C or G

<400> 106
```
ggagnnnntt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtacac agaatagctg agcagttcac     120
ttcagggatc aggtcatctc tgctcctcct agtttcacca tgttctggca ataaaaaaca     180
catattatat cctggttttc tctatccttg cattactaag gtgactgtct ctctttatac     240
atccttgtat ggttctccca gtattagcaa gattgtatat ctgtaaagaa tgtccagttt     300
tgtaaatatt tccctgcctt ttttttctt tttttacatc tgattttaat gcttcgttaa     360
cttcaaaagg aactggtaga gttcagaagg tgagctgttg tttttctaaa cctcttccca     420
ggaaggggac attgacactt gaatttttgt caccttttc ctcattagaa ggaaagtaga     480
aagccttact gtaggatttt taaaaaaaaa tccatctcac cccatattgg tcttaaataa     540
gtatagacta attaacctaa gctaccttta acaacgtaga atttaanatg ggttcatata     600
tgtgagaaaa acctgaatat aggacagggg tcctactttt ttccccacct ctgtcgccca     660
ggctagagta ntaantggtg gatcttggcc cactgcaacc tctgcttcta gggtcaagtg     720
attctcctgc tcagcctncc aagtancccg ggaattggaa gagtatgcca ccacgcccag     780
ctactttttg gaattttagt nnaaaacagg ttcatcatgn tggncccnga agggcnctta     840
antcctgncc ttnagngatc cccccnnana ngaaaccntg gncnncccaa nnnncnggnn     900
tntagcnnnn ccnccgngcc canncta ctt tnnnaannnn nnnnnnnnnn nnnnnnnnnn     960
nnnnnnnnaa nnngnncnnn nccngnnngn ccnnnnnngg gnaantc                  1007
```

<210> 107
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 107
```
gnagnnnnnn nngattgggc cctctagatg catgctcgag cggccgccag tgtgatggat      60
atctgcagaa ttcgccctta gcggccgccc gggcaggtac tttttttttt tttttttttt     120
tttttttttt aattaattag aaagtaggct gggcacggng gctcatgcct ataatcccag     180
cacttgggga ggccgaggat ctcctctctg gnggatcact tgagggcagg agttaagaga     240
ccatcctggc caacatgatg aaaccctgtc tctactaaaa atacaaaaag tagctgggcg     300
tggtggcata ctcttacaat cccggctact tgggaggctg aggcaggana atcacttgaa     360
cctaggaagc agaggttgca gtgggccaag atcacaccac tatactctag cctgggcgac     420
agaggtgggg aaaaaagtag gacccctgtc ctatattcag gtttttctca catatatgaa     480
cccatctaaa ttctacgttg ttaaaggtag cttaggttaa ttagtctata cttatttaag     540
accaatatgg ggtganatgg attttttttt aaaaatccta cagtaaggct ttctactttc     600
cttctaatga ggaaaaaggt gacaaaaatt caagtgtcaa tgccccttcc ttggggaaga     660
ggtttagaaa aacaacagct caccttntga acttttacca gttccttttt gagttaaccg     720
aagcnttaaa aatcagatgt aaaaaangaa aaaaaaaggc cgggaaattt ttaccaaact     780
nggacattct ttacagatat acaatcttgc taaaacctgg gaaaaccctt cccngggtgt     840
ttaaagggga aacagtcccc cttataatgc ccggggttna gaaaanccccg gattttnnaa    900
aaaggggttt tattgcccaa aactggggga accttngggg ggncccaaaa nnaacctgan     960
cccctgaagg naccgggtnn annnnntttt tgggaccttg gccgggaacc ccctttnggg    1020
ggna                                                                 1024
```

<210> 108
<211> 470
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(470)
<223> n = A,T,C or G

<400> 108

```
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtactattt tttttttttt     120
ttttcgtgtn tttgacattc cttgaatctg ttttttattc cccttccaca gaacaggcct     180
gggactttcc aacaccctgc taaggaagtt ctgtgtccaa gtcccaccca ggctgggttg     240
tccccacctn ctncagccca cacagcccag gcagcatccg ggccagtgcc ctgcatgaca     300
nagggtcttt gttgtgtaat gnttgttccc aagttgcatt ttctaaccga atcagtgtgt     360
tttcatgaaa ctgagtgtta ctgtggacca gtaagttnct ctgttgtctt cagtggtctt     420
cctgtgtggc tcaagggttc tctgtgagag tctggatttt catttctggg                470
```

<210> 109
<211> 808
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(808)
<223> n = A,T,C or G

<400> 109

```
gggcctctag angcatgctc gacggccgcc atgtgatgga tatctgcaga attcgcccctt     60
agcgtggtcg cggccgaggt acaagtctgc ctaagagaca gaagtgagtn ttataatcta     120
cttggccatt cctcccagca gagaagcagc aggtagatat ggcatgcact gtgcctgctg     180
ctgctgctct tgtggcgaac actcagatgt ggaaccatag agggaccttg aggagctggg     240
acatgattct ttagagaaga gaagagacgg ggagcacagc atgagaatgg ccagtcaacc     300
catttcaaat tcttttatta aagtgccccc cgaggggcct tgcacaaaga tgatggggag     360
agcagaactg ctgctccttg acagaactct gatccttaca ctttgtttgg agtgggcttg     420
gggacagtca caagccatga aacatgaatc caaaatggtc cccagatgag ccatggtgaa     480
ccaacagatg caagcaactt cttaaactgc tctattaaac actgctttat atgtgtcccc     540
atgatacaga aaagtgggat ggggccagcc attccagaaa tgaaaatcca gactctcaca     600
gagaaccctt gagccacaca ggaagaccac tgaagacaac agaggaacta ctggtccaca     660
gaaacactca gtttcatgaa aacacactga ttcgggtaga aaatgcaact tgggaacaaa     720
cattacacaa caaagaccct ctgtcatgca gggcactggc ccggatgctg ctgggctgtg     780
tgggctggaa gangtgggga caacccac                                        808
```

<210> 110
<211> 471
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(471)
<223> n = A,T,C or G

<400> 110

```
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggcccgc      60
cagtgtgctg gaattcgccc tttcgagcgg ccgcccgggc aggtacagcg acgtgatgat     120
gtagaggcgc ttcccatcca ggctgagctg gatcatctga gggcctncag ccaccccgttt    180
tcccttgacc actagggggct ctggctggga ctttagttcc tcgtcctcca gcacttgcac    240
agggcctccc ttaacaatgc tgcctccgag gaagagctgt cctgtgaggc ggggtctctg     300
tgggtcagag atgtcatact gcctcaggtc cccatgcagc cagttgctga agtagaggaa     360
gcggtcgtcc agggagagca ggatgtcggt gatcaggcct ggcatttcgg gcagcagcca     420
gcccttcact ttcttggggg gcacctggat caccttctcc actgaccatg t              471
```

<210> 111
<211> 468
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(468)
<223> n = A,T,C or G

<400> 111
actatgacca tgattacgcc aagcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt acttnnttnc tttntttaca 120
tctgatttta atgcttcgtt aacttcaaaa ggaactggta gagttcanaa ggtgagctgt 180
tgttttncta aacctnttcc caggaagggg acattgacac ttgaattttt gtcacctttt 240
tcctcattag aaggaaagta naaagcctta ctgtaggatt tttaaaaaaa aatccatctc 300
accccatatt ggtcttaaat aagtatagac taattaacct aagctacctt taacaacgta 360
gaatttagat gggttcatat atgtgagaaa agcctgaata tangacaggg gtcctacttt 420
tttccccacc tctgtcgccc aggctggagt atagtggtgt gatcttng 468

<210> 112
<211> 813
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G

<400> 112
attgggcctc tnnagcatgc tcgacggccg ccatgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtaccatg ctgacttctt ggtatctttt anggcctaat 120
tttcccttcc ttgagattac tgtagtgtgt tccagctaat ttctatttgg aaacgagttg 180
gaacagctga aaactaggta ttattgaagg caaagcagcc tcacgtcagt tttttatcag 240
ctcatttggg aagttttnnt tttttttntn ttaattaatt agaaagtagg ctgggcacgg 300
nggctcatgc ctataatccc agcacttggg gaggccgagg atctcctctc tggtggatca 360
cttgagggca ggagttaaga gaccatcctg gccaacatga tgaaaccctg tctctactaa 420
aaatacaaaa agtagctggg cgtggtggca tactcttaca atcccagcta cttgggaggc 480
tgaggcagga gaatcacttg aacccaggaa gcagaggttg cagtgggcca agatcacacc 540
actatactcc agcctgggcg acagaggtgg ggaaaaaagt nagaccccctg tcctatattc 600
aggctttgct cacatatatg aacccatcta aattctacgt tgttaaaggt agcttaggtt 660
aattagncta tacttattta agaccaatat ggggtganat ggattttttt ttaaaaatnc 720
tacagtaagg ctttctactt tccttctaat gaggaaaang gtgacaaaaa ttcaagtgtc 780
natgcccctt cctggggaag aggtttaaaa aat 813

<210> 113
<211> 506
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 113
nccaacttgg taccganctc ggatccctag taacggcana cattganctg atacgccaag 60
cttggtaccg agctcggatc cactagtaac ggncgccagt gtgctggaat tcgcccttcg 120
agcggccgcc cgggcaggta cgcggggcct ctggcgctac catggcgttt ggcaagagtc 180
accgggatcc ctacgcgacc tccgtgggcc acctcataga aaaggctaca tttgctggag 240
ttcagactga agattggggc cagttcatgc acatctgtga cataattaac actacccagg 300
atgggccaaa agatgcagtg aaagctttga agaaaangat ttncaaaaac tacaatcata 360
aagaaatcca acttaccttg tcacttattg acatgtgtgt gcagaactgt ggtccaagtt 420
tccagtctct gattgtgaag aaggaatttg ttaaagagaa tttagttaag ctactgaatc 480
ccagatacaa cttgccatta gacatt 506

<210> 114
<211> 813

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G

<400> 114
```
gggcccntnn agctgctcga gcggccgcca gtgtgatgga tatctgcaga attcgccctt      60
agcgtggtcg cggccgaggt acaacttatt ctaaatattt tcattttctg tgttctaaat     120
agaaatatta agttgcagta aaaagagaaa aaaaggctat ttagcattac aaagaatcat     180
atttaaaggc tgcccaatgt agagtctagt gacctgttca ggacacctga aatataatta     240
aatgacaatt atcaaggttt taacaattta taattctaaa ccagaggatt ataaagaagt     300
gcaaattgac ttttacattc aactttagtt aaatgaaggc actcagtatt cttcctgaat     360
aatacattca gtttctcaca ttttatgctt tcatctattc agaattattt catagtaaaa     420
taatctactc ttatcacagc tgtgtgacga tttctaaatg taggaaggcc tgtgaaacat     480
gacactgcag ttaaattggt tggcctaagg actaagtaat tttcttctg ctgaagtttt      540
aagtgagtat ttgttccaaa caagttctgt tgaaatctca cgctgttgtc aggaatcagt     600
gttatcctgg aactgttatt ctatttaatc ttcattatag cagaaatgtg ccaccatggc     660
tttgacatgt tggtaggtat tgtcttccag gcttcaaagc tgcacagagt ctacgtttta     720
gagagttggc acctttgatg tggtagtgag ctgatcatnc actttcttct cagtcaccat     780
cattttgagc tcctttgtgc tggtgagcat can                                  813
```

<210> 115
<211> 471
<212> DNA
<213> Homo Sapien

<400> 115
```
accagctatg acctgattac gccaagcttg gtaccgagct cggatccact agtaacggcc      60
gccagtgtgc tggaattcgc ccttagcgtg gtcgcggccg aggtaccatg attttgtgtt     120
caggaaacaa agaacatgaa atattacatt cttcagaatg tttttcttgt gccattaaat     180
gaatcaagta aatgaggcaa tgaggcacaa ataaggaatt tagatttcag caatattttg     240
atccactgta gctttcagtt tctgaaactt tggaagggcc tacatacttt gtaagaattt     300
ttggcttata ttgttaataa tcaacagagc caagaaaaca tttcttagaa tgttcaaaga     360
caccacctta gccttccttc cctgcagcta taacattatt tttctaagag aaaaggcaga     420
gagtcttcac aaagccatac cagacttaaa attaccagag aacattttgg t             471
```

<210> 116
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 116
```
ttncannggg cccctagagc atgctcgacg gccgccatgt gatggatatc tgcagaattc      60
gccctttcga gcggccgccc gggcaggtac tttttttttt tttttttttt tttttttgtg     120
tgtggtcttg aactcctggc ctcaaatgat cttcctgcct cagcctccca aagtcctggg     180
attactggca tgagtcacca cacctggctc attctttttc ttaatatggc tctaaatggc     240
tttttatttt ttttgctttg gcaatttatt tctaggaaat taaataattc tttcattata     300
atcaagggaa tgaaagactt caggaggtcc atagtggagt tcaaaaccat atggagttca     360
ctattctaca agattataca ggcaataata taagtattct aaggtgtttt aggtagattt     420
atagatgtta gatttcaaaa tgggttaata agtgtttatg aatttccaag gtgtatcact     480
aacttctcaa gatgaaatca tatatagaaa ctatcaaaat tttccttgtt ctgctgtcaa     540
gaaatgaata atatacactg atataactgt aactcacatc taaagggata gtgcttgaat     600
aagctaattt acaatgagtt caaggtatta ttttaaaatt cttattgncc ttagacaata     660
attatgccaa caaatgtgaa aaatattaaa tctccttctg ntaatttttc cagttttatt     720
```

acccaaaagt cacacaggta atgcaagtca tgaaataaat caaatgagcc cttcctggag 780
agcctacttt atttaccttg ggaaaatgga tgacatnt 818

<210> 117
<211> 467
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(467)
<223> n = A,T,C or G

<400> 117
accactatga cctgattacg ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg caggtactac tggttttctc 120
cctggcttca cgtgtctctg tgttccccta tgctggggtg tcctcccagt gctttcaggc 180
ttcatctcct tcctaacctc tcctttctat tttttttttt ttttttgaga tggagtcttg 240
ctcagtcgcc cangctggag tgctaacctc tcctttcatg tggagatgga cagggatggc 300
aggagcactg agtgctcttg acaacaccat tgaagatgat gctgacgatc agctaccctg 360
tggagaaggc aggccaggct gggtgagagg ggagctcctt ggaagtcagg gggtctgtaa 420
ggacagcaag gatctctttg tcccaacctc cagcagcctt tatgggt 467

<210> 118
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 118
gggcctctna agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgccctta 60
gcgtggtcgc ggccgaggta cctggggtct cagggttgct ctgggcctga tcatccactc 120
agatctgtaa ggaggatttg caggatccat ttagaaagat cctcccttac ttccacaagc 180
atggcctttg gctcttaaat acctgtgctg gggttttgta attatagaaa caacaggaac 240
caaaactcat taatgttgag ctacaaacca gagggaagct tctttctcaa aacagggctc 300
aggcctagaa aaatctagtt ttctgaaatc gctagccagc aacagcactg agatggccat 360
cccagaaaca aggccaacac agaagcaccc ataaaggctg ctggaggttg ggacaaagag 420
atccttgctg tccttacaga ccccctgact tccaaggagc tcccctctca cccagcctgg 480
cctgccttct ccacagggta gctgatcgtc agcatcatct tcaatggtgt tgtcaagagc 540
actcagtgct cctgccatcc ctgtccatct ccacatgaaa ggagaggtta gcactccagc 600
ctgggcgact gagcaagact ccatctcaaa aaaaaaaaaa aaaatagaaa ggagaggtta 660
ggaaggagat gaagcctgaa agcactggga ggacacccca gcataggggа acacagagac 720
acgtgaagcc agggagaaaa ccagtagtac ctgcccggcg gccgntcgaa agggcgaatt 780
ccagcacact ggcgggccgt tactagtgga tccct 815

<210> 119
<211> 811
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(811)
<223> n = A,T,C or G

<400> 119
gggcctctnn agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac tctatttttt gcttgtatga ttgatgggtc tttcattatc 120

```
tgtgattgac attctatgag taggtgcttt tgctttgcct ataagtcgtt attatgaagg      180
aggaatggtg aataagaagg taatttagaa aagcctatat taaatatacc atgaacattg      240
aatatagcaa gatcttattc tctagttgtt atcttagttg ataaattctg tatgtgttat      300
gtgtttgtgt atacatatgt acttaatctg atcggtatct aaaagaagga aaggatggtc      360
aggaaacatt tatcataaat gtagccaagg atatcaatta gggtagacaa gaataggaca      420
aaaataggcc agagctcctg aggaggtgat atgggtccct tgatttgcag aaaatgacag      480
cctatccaag tggcccagtg tatgcctccc agtagcagtg ggcatgtaaa ctgcagcgac      540
cttattttta aaaccaaaaa cctagtatgt ggacaaagaa catgacaata tttggtacct      600
gcccgggcgg ccgctcgaaa gggcgaattc cagcacactg gcggccgtta ctagtggatc      660
cgagctcggt ccaagcttgg cgtaatcatg gtcatagctg gttcctgtgt gaaattggta      720
tcccgctcac aattnccaca cacatacgaa cccggaagca ttaaagtgta aaagcctggg      780
gtgcctaatg aagtgagcta ctcacattaa a                                     811
```

<210> 120
<211> 466
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(466)
<223> n = A,T,C or G

<400> 120

```
anttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag       60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg tacccacgtt ttgctccaca      120
ctccttgacc acaggggctc ggacacaaac ccctgtcacc aggagagtca gtcagcacta      180
cttgggaggg ctaaagggaa atttggaaat aaaattccaa agtttggagt aaaaaaattc      240
aagtgttgat tttatattct ttccctttct gacacagcct aaagcgtagg gggaacatgt      300
gtttatctgt gggagataaa caagatggag tcccaaagac tttaacaaaa tattttttta      360
aaaatccact agaatagaaa atacattatt tagatatact ttatgctgag agtgagtata      420
tatgcttgtc ctatttaaac ttgtgagaaa aagtggtatc ccttng                     466
```

<210> 121
<211> 812
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(812)
<223> n = A,T,C or G

<400> 121

```
ttgggcccnt nnagcatgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc       60
cttagcgtgg tcgcggccga ggtacaactc tccagggcac aatacgttta cagctgcctt      120
tccttcacat acttttctaa ttcagaacta ctcacaattc taagcaaatt cccattcacg      180
aagtctgtcc ataatgcgac cttctctttt tttaacatat acatcttaaa aaacaaatat      240
ataaaaaatt cttatttttgc tggaatgctt tcaatttttc acattttaca tgatcatcac      300
atttatttct tatattgaaa ggcatggttt ctgttgacat gtcgtgcaaa gccaaaaaaa      360
aaaaaaaaaa aaagggctgg attgcttttc aattggtcta acacttttcc ttgtctaggc      420
tttggatttt aaagttcatg acagccccac caccagtaga aaccccaagg cttgcatttc      480
ctggtaatcg actggaaacg tcccctgttg gccatgctaa gattccttca acagggtcat      540
cctgcattta ttctccttct gccccacccc cacaatgaaa caagatagcc cccatatttc      600
taaatgtatc aagggatacc actttttctc acaagtttaa ataggacaag catatatact      660
cactctcagc ataaagtata tctaaataat gtattttcta ttctagngga tttttaaaaa      720
aatattttgg taaagtcttt ggggactcca tcttggttat cttccacaga taaaccatgt      780
tccccctacg ctttaggctg tggtcagaaa gg                                    812
```

<210> 122
<211> 467
<212> DNA

<213> Homo Sapien

<400> 122
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg taccatgctg acttcttggt 120
atcttttaag gcctaatttt cccttccttg agattactgt agtgtgttcc agctaatttc 180
tatttggaaa cgagttggaa cagctgaaaa ctaggtatta ttgaaggcaa agcagcctca 240
cgtcagtttt ttatcagctc atttgggaag tttttttttt tttttttttt ttttaattaa 300
ttagaaagta ggctgggcac ggtggctcat gcctataatc ccagcacttg ggaggccgaa 360
ggatctcctc tctggtggat cacttgaggg caggagttaa gagaccatcc tggccaacat 420
gatgaaaccc tgtctctact aaaaatacaa aaagtagctg ggcgtgg 467

<210> 123
<211> 864
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(864)
<223> n = A,T,C or G

<400> 123
gggcctctng agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gcccgggcag gtactttttt tttttttttt tctttttttta catctgattt 120
taatgcttcg ttaacttcaa aaggaactgg tagagttcag aaggtgagct gttgtttttc 180
taaacctctt cccaggaagg ggacattgac acttgaattt ttgtcacctt tttcctcatt 240
agaaggaaag tagaaagcct tactgtagga tttttaaaaa aaaaatccat ctcaccccat 300
attggtctta aataagtata gactaattaa cctaagctac ctttaacaac gtagaattta 360
gatgggttca tatatgtgag aaaaacctga atataggaca ggggtcctac tttttttcccc 420
acctctgtcg cccaggctag agtatagtgg tgtgatcttg gcccactgca acctctgctt 480
cctaggttca agtgattctc ctgcctcagc ctcccaagta gctgggattg taagagtatg 540
ccaccacgcc cagctacttt ttgnattttt agtagagaca gggtttcatc atgttggcca 600
ggatggnctc ttaactcctg ccctcaagtg gatccaccag agaaggagat cccttggnct 660
tccccaagtg cctggggatt attaggcatt gaagcccacc cgtggcccca agccctacnt 720
tttcttaaat taaatttaaa aaaaaanaan nnnnnnnnnn nnaaaaaaaa ccttttcccc 780
aaattgganc ctgggtttaa aaaaacctgg acccttnaan gggcntggnt tttggccctt 840
tnaaataaat tnccccctaag gnnt 864

<210> 124
<211> 467
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(467)
<223> n = A,T,C or G

<400> 124
antatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacatgcac acacacacac 120
acacacacac acgtgtctac tgggctcctt ttggattttt tagttcaatc agaaatcacc 180
aaacagatca ataaagaggc aatgttaaat gaccgggaaa ttggtaatgt gacatcacaa 240
cactgccttt aaggtgccat atctaaatcc aggtagcact gctgctagca gaatctgttg 300
ttttaggaga caagggtggg ctgggtatgc tggctcgtgc ctataattcc agcactttga 360
gagggcaagg caggagaacc acattaggct aggagtttan gaccagcctg ggcaacatag 420
tgagatccca tctctacaaa aataaaaaaa ttagctttcc agctgct 467

<210> 125
<211> 833
<212> DNA

<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(833)
<223> n = A,T,C or G

<400> 125
gnnnnnnnnn ngnnttnnnn ntttaataga tgagcgtacg gngcctgtaa agcatgctcg 60
agcggccgcc atgtgatgga tatctgcaga attcgccctt agcgtggtcg cggccgaggt 120
acctgatatc gtttaacttt cctctttatc tttcttagag atacttcaca tgtgggacag 180
attatatttt ggaaagatgt ccacaacaat attgcccatc ccacattgct catcttacaa 240
tgtgatctca agactcctcc cactgagtgg gtgagaaggg acttatacca ctttcatttg 300
aatctaggca gatctgtgtg acagccttga ccaatagagt atggttaaag tgatgccccc 360
aggcatggtg gcccatacct ggaatcctgg tttttccggg aggcccaggt gggggtagag 420
gtgaggggga tgattgtttg aacacacgag tttgagacta ccctgagcaa cacaatgaga 480
ccctattttt ttttaatgat ttctgaagca gaatcacaaa tagccgtgcg ttttttttctt 540
gcgcttttag gatacttact tttaaaaccc agtcaccata ttgttaggaa gcccaaacag 600
cacacataga gagacatacg gagaagccaa ccatagaggt tcctgttgac agctcantcg 660
aggtcttaac caacagtcat acttagctgc cagccatatg agtgaagggc ttncagatga 720
ttctaacgcc cagcagttgg gtccccccag cctgtaagcc ttcccagctg aggcctnaca 780
atgatggagc anagaaaagt gtccctgtcc aaattctgac ccatgataaa atg 833

<210> 126
<211> 788
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(788)
<223> n = A,T,C or G

<400> 126
nnnnnnntnn nnacanttga ctgataccca acttggtacc gactcggatc cactagtaac 60
ggccgccagt gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac gcgggggatc 120
agagagaagc gaggttctcg ttctgaggga caggctcgag atcggctgaa gagagcgggc 180
ccaggctctg tgaggaggca agggaggtga gaaccttgct ctcagagggt gactcaagtc 240
aacacaggga acccctcttt tctacagaca cagtgggtcg caggatctga caagagtcca 300
ggttctcagg ggacagggag agcaagaggt caagagctgt gggacaccac agagcagcac 360
tgaaggagaa gacctgcctg tgggtcccca tcgcccaagt cctgcccaca ctcccacctg 420
ctaccctgat cagagtcatc atgcctcgag ctccaaagcg tcagcgctgc atgcctgaag 480
aagatcttca atcccaaagt gagacacagg gcctcgaggg tgcacaggct cccctggctg 540
tggaggagga tgcttcatca tccactttca ccagctcctc ttttccatcc tcttttcctt 600
ctccttcntt ttctnctnct nctnctgcat ctntaatacc aagcacccca naggaggttt 660
ctgctgatga tgagacaccc aaatncttcc anagtgctna anatagcctg ntncttcccc 720
cttnggncnt gctttccctt ncnttanatt naatnctgat taaggggttc cancanncca 780
aaaggaat 788

<210> 127
<211> 766
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(766)
<223> n = A,T,C or G

<400> 127
gggcctctna agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tactccaggt agttttcctg cacccaatct tgggtgagca 120

```
gcttcctggg ctccccataa atgaggtgct ccatcccatc atacagcccc atcatattca      180
gtgcttccca gatgacctcc tcaggggtgc agtagccctc tatgaagatt atgcttagga      240
taagtatgag aatgccagtc ttgggcatgc tctggacatc actcagcatc ccatcatagg      300
tgaggcccag ggaggtgaca aggacaaagg agtggccagt gggatccact tcctttacat      360
caatgccaaa gaccagcagc atgcactcgg aggcttcact aaacaacaaa gggaagtggt      420
cttcataatt ttttatgaca ctctccagta tttctgcctt tgtgatcggc tccttcattt      480
gatacttgaa gagcagaaac tgcaccaaat cagtcacctt ttcatctatc tcacttctgg      540
gtaaagactc actgtctggc aggacctgta gggtgcttgg actctcctcc ttttggctgc      600
tggagccctc atcagattga tctaatggaa gggaagcaac gaccganggg gaggagcagg      660
ctatctgagc actctgggga ggatttggtg tctcatcatc agcagaaacc tnctctgggg      720
tgcttgggta ttagangatg gcaggaagaa gaagangaag aggaag                     766
```

<210> 128
<211> 779
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 128

```
gnnnnntnnn nacactantt tnngacccgn canctggtac cgactcggac cactagtaac       60
ggccgccagt gtgctggaat tcgccctttc gagcggcccg cccgggcagg tactcctcat      120
cctgcgtttg gtctccaggt gtcgcctttc tgccgtgttc ctaatatttt gattcctgtc      180
ttgaaaaaag cacctgctgc acagtaagcc cagggatgtg gcagctgcag cgggcttggc      240
tttgtgagga accgggtgtg tccacgttgg gggaacatca tacttgatac acacgttttt      300
atttgcacaa agaaaatgct atttttggag ccagaatttt catgtctgat ttatggtgat      360
tttcttaaga accagaactg ctggcagaaa gggggcaccc acacgcttag atagccgatg      420
tcttattaga gggcagtttg tggttcctga tttggaaatt aatattctcc aaacattcca      480
gtccaatgaa agttttatcc gctttcccat gtaaaaattc ttcccatgag agtgacttga      540
tcctcacaat cccgttgaag tcgtgtgtga gtcctacagt attaggttca gcattgccgt      600
ctncaagtgc tctttgtagg gaaacagttt ctggtcatga caagcttcca cttccatctg      660
atcctggcct ggcctggaaa cagagcacat gtgtttgagg atggcngtgt ttggggacag      720
gacatgancg tattgtgtgg ggctgctagg acangcgtgg tgtggtgggg gantgtccn       779
```

<210> 129
<211> 774
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(774)
<223> n = A,T,C or G

<400> 129

```
ttnnnantgg gcccntngag catgctcgac ggccgccatg tgatggatat ctgcagaatt       60
cgccccttagc gtggtcgcgg ccgaggtacc tgggtgggac tgggaaactg tgaaacaagt     120
agactgactt ggacactccc ccaccacacc acgcctgtcc tagcagcccc acacaatacg      180
ctcatgtcct gtccccaaac accgccatcc tcaaacacat gtgctctgtt tccaggccag      240
gccaggatca gatgggaagt ggaagcttgt catgaccaga aactgtttcc ctacaaagag      300
cacttggaga cggcaatgct gaacctaata ctgtaggact cacacacgac ttcaacggga      360
ttgtgaggat caagtcactc tcatgggaag aatttttaca tgggaaagcg gataaaactt      420
tcattggact ggaatgtttg gagaatatta atttccaaat caggaaccac aaactgccct      480
ctaataagac atcggctatc taagcgtgtg ggtgcccccct ttctgccagc agttctggtt     540
cttaagaaaa tcaccataaa tcagacatga aaattctggc tccaaaaata gcattttctt      600
tgtgcaaata aaaacgtgtg tatcaagtat gatgttcccc caacgtggac acacccggt       660
tcctnacaaa gccaagcccg ctgcagctgc cacattcctg ggcttactgt gcacangtgc      720
tttttttaag acaggatcaa atnttaggac ccngnanaan gcaacacctg gaga            774
```

<210> 130
<211> 803
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(803)
<223> n = A,T,C or G

<400> 130
```
ggnnnnttnn anacgnatcn gacctganta cgccaacttg gtaccgagct cggatccact      60
agtaacggcc cgccagtgtg ctggaattcg cccttagcgt ggtcgcggcc cgaggtacct     120
tggaagttat gtcattaata taggctggtt cgtcaaataa agcaaaacct tgcaatatca     180
gctagattta cactccggga cgttgcccaa aggtaggaag aaagcagagg gaaatatttc     240
agtcatcatt tccaaagtca ttatcaaaat ctgtgaggaa gtttaatctt ccaaagagtc     300
aatgtcagac atcaggcctc tgttgcctgc ttctctcgag gcactagatt aggagtcttc     360
aataagagac ttaacatgag gtatatggaa gatgaggcac cgagataagt tcatcattag     420
gtgtgagcac tgctcaccct tgctggcaag ttctccttaa gggcctgaag cacaggtgtc     480
caaagaaaag cgttaagtcc atcttaatag aatctatgtg gtatatgatg tggtcagccc     540
ccggtctgtg atcagcaaga acctacagca cagattatgc cctgcccact tcaatgaata     600
cctactctcc tncattctcc atcacttttt ttgctatcaa gactccggac cttgcccatg     660
gagaagttta gagaggaact cttgtggaga gctggtttat tttctgccct gtgcgacgag     720
tttcagcttg gccaaagaaa ggagtcaagg ttattaaaaa gcatcacaat ggtagatctt     780
ccaggcttgg nttttttgt ttt                                               803
```

<210> 131
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 131
```
antgggcctc tnnagcatgc tcgacggccg ccatgtgatg gatatctgca gaattcgccc      60
ttngcccgct ttccagncgg gaaacctgtc ntgccagntg cattaatgaa tcngccaacg     120
cgcggngaga ggcggnttgc gtattgggcg ctcttccgct tcctcgctca ctgactcgct     180
gcgctcggcc gttcngctgc ggcgagcggt atcagctcac tcaaaggcgg taatacngtt     240
atccacagat caggggatan cggcaggaaa gaacatgtga ncaaaaggcc agcaaaaggc     300
caggaaccga aaaaaggccg ctttgttggc gtntnaccat aggctcnncc cccttgacna     360
gcttcacaaa aatctacgct cagntcccag gtgcnaaatc ccganaggac tntaangatt     420
cnnggnnttt ccccctgaan nctncctant gcgctctcct gtnccaacct tgccgtttac     480
cggatacctg nccgcctnna tnccttcgng aagcntggct tttnaatngg ctcacttttt     540
gggnatctaa aancggnnta ggcngnncgt tnnaaantng nnttttgcn caaacccccct     600
gtttaaactn acccatgngc attatcccgg aaacttttgg tnttngaatc caaccnggna     660
aanacacnan ttaatnngcc nttggcntga aacccacttg ggtnaaccat ggattttggc     720
ncnaccnagg gtnnttttnn nggcnggtnc ntacccggag ttctttnaaa acngggtggg     780
cncttanacc tatcnggnnt tcccctttan aaaaaaat                              818
```

<210> 132
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)
<223> n = A,T,C or G

<400> 132
acnntatgac ntgantaccc aacttggtac cgactcggac cactagtaac ggccgccagt 60
gtgctggaat tcgcccttcg gcccgcccgg gcaggtacct ggaaaataac ttctttcttt 120
tcctctagat tttcgaagaa gcaaataaat caagaataga aacctatata taggaggttg 180
ggcctcctgc aaagaatgaa gcactttttg ttaaatacag gagaggctac ttggctgcac 240
taatatgtgc tttttggaat cttatagagt gtcaccaagt tgaactttgg aatggcttga 300
atcatccctg gagcatctgt gccgggcagt caggagtgag tgcaccgcct cccacccagc 360
cccattgggc ctcacaccct cttcattcct ttccccatga ggcaggcaaa cacggtcatg 420
accatttgg ggttcacttc aaccaggtct tctggcaggg catacactct tgctccaatt 480
tttcgggcca tagagatggc atattttgca ttgttgagtt tctcatcatc attcagattt 540
tctgtcttca gaaggtcata gttaatggaa cctggttgga tggcatcgat gangtccaga 600
acaggcagac ttgtacctcg gccgcgacca cgctaagggc gaattctgca gatatncatc 660
acactggcgg gccgntcgag catgcatcta ganggcccaa ttcgccctat agtgagtcgt 720
attacaattc actgggccgt cgttttacaa cgtcgtgact gggaaaaccc tgcgttn 777

<210> 133
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)
<223> n = A,T,C or G

<400> 133
ntgggcctct nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg tacaagtctg cctgttctgg acctcatcga tgccatccaa 120
ccaggttcca ttaactatga ccttctgaag acagaaaatc tgaatgatga tgagaaactc 180
aacaatgcaa aatatgccat ctctatggcc cgaaaaattg gagcaagagt gtatgccctg 240
ccagaagacc tggttgaagt gaaccccaaa atggtcatga ccgtgtttgc ctgcctcatg 300
gggaaaggaa tgaagagggt gtgaggccca atggggctgg gtgggaggcg gtgcactcac 360
tcctgactgc ccggcacaga tgctccaggg atgattcaag ccattccaaa gttcaacttg 420
gtgacactct ataagattcc aaaaagcaca tattagtgca gccaagtagc ctctcctgta 480
tttaacaaaa agtgcttcat tctttgcagg aggcccaacc tnctatatat aggtttctat 540
tcttgattta tttgcttctt cgaaaatcta gaggaaaaga aagaagttat tttccaggta 600
cctgcccggg cggccgaang gcgaattcca gcacactggc ggccgttact agtggatccg 660
agctcggtac caagcttggc gtaatcatgg tcatagctgt ttcctgtgtg aaattgntat 720
ccggtcacaa ttcccacaca tacgaacccg gaagcataaa gtgtaaagcc tgggg 775

<210> 134
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 134
acnnttgacc tgatacccag ctggtccgac tcggacccta gtaacggccg ccatgtgctg 60
gaattcgccc ttgagcggcc gccggggcag gtctataagt ctttaaattg ggtcgtgttt 120
ttagcaggta agactaattt atctcttctc cagtgaattg atgctggtgg gattcgattt 180
cacatcacaa cttatattga tagggatttc cttcccaaga gtaataaatt gtttggtttg 240
atataaactt gggggcatat tcaatatcaa ggtacttttt tttttttttt aagttttagt 300
tcagaataac attaattttg agagattgag gtaaagaacc ttaactaatg ctaaggagtt 360
tattttgatt aacataggtt attctgacca ccacctcttc cttccttaat ctccttagaa 420
tctgacagtc tcaaagctgt cacacaaatt agactaattt tgacactttg aaatgaaaac 480
ttcaaggaag aagtagccac ggacagttat gtttataatc agtaggtggc actctttcct 540
caggtagccc cccatttca catgatgtgt ttgaaggtta aatgccccaa aagtgctgag 600
tcagctataa aactaagtcc ctgaattcca tggccctttt aaatatgtaa tcattcaaga 660

```
ttgaaaaaaa aaattaagca ttttttgntt gnttgcttgg ttggttttga gacngagttt     720
cactcttgnt ggccaggctg gagtgcaatg gcgccatctn actcactgna ag             772

      <210> 135
      <211> 784
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(784)
      <223> n = A,T,C or G

      <400> 135
ntgggcctct nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct      60
tagcgtggtc gcggcccgag gtacttcttt tgaataattc agtattttaa aaatgcaagc     120
caggcacagt ggctcacgcc tgtaatccag cactttggaa ggccgaggtg gggggatcac     180
gaggtcagga gttcaagacc agcctggcca acatggtgaa acctcatctc tactaaaaat     240
acaaaaacta gctgggcatg gtggcgggca cctgtaaccc cagctacttg gagggctgaa     300
ggagaattgc ttgaatccgg gaggcagagg ttgcagtgag ctgagatggc gccattgcac     360
tccagcctgg ccaacaagag tgaaactccg tctcaaaaac aaacaagcaa acaaacaaaa     420
aatgcttaat tttttttttc aatcttgaat gattacatat ttaaaagggc catggaattc     480
agggacttag ttttatagct gactcagcac ttttggtggc atttaacctt caaacacatc     540
atgtgaaaat ggggggctac ctgaggaaag agtgccacct actgattata aacataactg     600
tccgtggcta cttcttcctt gaagttttca tttcaaagtg tcaaaattag tctaatttgt     660
gtgacagctt tgagactgtc agattctaag gagattaaag gaanggaaga ggtggtggtc     720
agaataacct atgttaatca aaaataaact tccttagcat taagttaang gtctttacct     780
caan                                                                  784

      <210> 136
      <211> 768
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(768)
      <223> n = A,T,C or G

      <400> 136
acnttgantg nacccacttg tccgactcgg atccctagta acggcgcagt gtgctggaat      60
tcgccctttg agcggccgcc gggcaggtac tttttttttt ctttttttac atctgatttt     120
aatgcttcgt taacttcaaa agggaactgg gtagagttca gaaggtgagc tgttgttttt     180
ctaaacctct tcccaggaag gagacattga cacttgaatt tttgccacct ttttcctcat     240
tagaaggaaa gtagaaagcc ttactgtagg atttttaaaa aaaaatccat ctcaccccat     300
attggtctta aataagtata gactaattaa cctaagctac ctttaacaac gtagaattta     360
gatgggttca tatatgtgag aaaaacctga atataggaca ggggtcctac tttttttcccc    420
acctctgccg cccaggctag agtatagtgg tgtgatcttg gcccactgca acctctgctt     480
cctaggttca agtgattctc ctgcctcagc ctcccaagta gctgggattg taagagtatg     540
ccaccacgcc cagctacttt ttgtattttt agtagagaca gggtttcatc atgttggcca     600
ggatggtctc ttaactcctg ccctcaagtg atccaccaga gaggagatcc tcggccttcc     660
caagtgctgg gattataggc atgagccacc gtacccagcc tactttctaa ttaattaaaa     720
aaaaannnnn nnnnaaaaaa acttnccaaa tgactgataa aaaactgc                  768

      <210> 137
      <211> 777
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(777)
```

<223> n = A,T,C or G

<400> 137
ttgggcctct ngagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg taccatgctg acttcttggt atcttttaag gcctaatttt 120
ccccttccttg agattactgt agtgtgttcc agctaatttc tatttggaaa cgagttggaa 180
cagctgaaaa ctaggtatta ttgaaggcaa agtagcctca cgtcagtttt ttatcagctc 240
atttgggaag tttttttttt tttttttttt ttttttaatt aattagaaag taggctgggt 300
acggtggctc atgcctataa tcccagcact tggggaggcc gaggatctcc tctctggtgg 360
atcacttgag ggcaggagtt aagagaccat cctggccaac atgatgaaac cctgtctcta 420
ctaaaaatac aaaaagtagc tgggcgtggt ggcatactct tacaatccca gctacttggg 480
aggctgaggc aggagaatca cttgaaccta ggaagcagag gttgcagtgg gccaagatca 540
caccactata ctctagcctg ggcggcagag gtggggaaaa aagtaggacc cctgtcctat 600
attcaggttt ttctcacata tatgaaccca tctaaattct acgttgttaa aggtagctta 660
ngttaattag tctatactta tttaagacca atatggggtg agatggattt ttttttaaaa 720
atcctacant aaggctttct actttccttc taatgaggaa aaaagtggca aaaattt 777

<210> 138
<211> 950
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(950)
<223> n = A,T,C or G

<400> 138
nnnnnnnnnn nnnnnnnnnn nttnnnnnnn nnnnnaaanc cnnnnnttna nnngnnaaac 60
cccattggna aanttaaccn ncccccaaaa gccctttngg ggtttaaccc ccgaaagcct 120
tccgggggna atcccccaact ttaagttaaa acnggggccc cgggcccaag ttggttggcc 180
tttgggggaa aatttccgcc ccctttccga agccgggccc ggccccgggg gccaagggta 240
ccatgggaat ggttaccttt tggcaagaac tggtcaaacc ctggaaattt tggtattttt 300
gctttggaca ttggccctaa attaattaag tttcaaggtg gtcaggcttt acccactttt 360
tggtctggca acatgcagaa gagacagtgc ccttttttagt gtatcatatc aggaatcatc 420
tcacattggt ttgtgccatt actggtgcag tgactttcag ccacttgggt aaggtggagt 480
tggccatatg tctccactgc aaaattgctg attttccttt tgtaattaat aagtgtgtgt 540
gaagattctt tgagatgagg tatatatctc actcttcatc aaactataag tttttttaag 600
taaaagaaaa tttattatga aactaaagga ataaaagaat gaccactcca taggcagaga 660
aacgtcactt taaggttttg acgtcaattg atttttgtcc aaatcaataa ttactgcaat 720
gattgaaaaa tgattattac taagtttgtt ttcattgtct caaggtctgc tgaactctgg 780
atccaggctg tgtcaacagg gtagtgtggt gcctcctgta cctcggccgc gaccacgcta 840
agggcgaatt ctgcagatat ccatcacact ggcggccgtt cgagcatgca tctagagggc 900
ccaattcgcc tatagtgagt cgtattacaa ttcactggcc cgcgttttag 950

<210> 139
<211> 779
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 139
ttgggcccnt agagctgctc gagcggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg tacaggaggc accacactac cctgttgaca cagcctggat 120
ccagagttca gcagaccttg agacaatgaa aacaaactta gtaataatca tttttcaatc 180
attgcagtaa ttattgattt ggacaaaaat caattgacgt caaaacctta aagtgacgtt 240
tctctgccta tggagtggtc attcttttat tcctttagtt tcataataaa ttttctttta 300
cttaaaaaaa cttatagttt gatgaagagt gagatatata cctcatctca aagaatcttc 360

```
acacacactt attaattaca aaaggaaaat cagcaatttt gcagtggaga catatggcca     420
actccacctt acccaagtgg ctgaaagtca ctgcaccagt aatggcacaa accaatgtga     480
gatgattcct gatatgatac actaaaaagg gcactgtctc ttctgcatgt tgcagacaaa     540
aagtgggtaa gctgacactg aaactaataa ttaggcaatg tcaagcaaat acaaattcag     600
gttgacagtc tgcaaagtaa catccatgta cctgcccggg cngnccgctc gaagggcgaa     660
ttccagcaca ctggcggccg ttactagtgg atccgagctc ggtaccaagc ttggcgtaat     720
catgggcata gctggttcct gtgtgaaatt ggtatncgct cacaattncc acaacatag      779
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<210> 140
<211> 779
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 140

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gcccntagag catgctcgac ggccgccagt gtgatggata tctgcagaat tcgcccttag      60
cgtggtcgcg gccgaggtac caggtgggct gacgcacatc ccctaaacat tctggatctc     120
ttactcatcg tgaaaggcag acgctctaag tctaaagtct agggtaggag tttccattct     180
ttggaaaacc aaagatggtt actcttctta atgaaactga gaagaaggta tctacagaaa     240
acactgaatt taaacaaatt atgaccttgt ttgttgaagc catcaaggac ccaagatata     300
tcaaagaaca acatctctgt attggcctac aggttcagag tgttttgagg tctgtttaag     360
cactaatagg attttaggcc agcatccagt cagaagagat agttcacaga ctcagagttg     420
gaaacagatt aaaaaaaaaa agatgtcaac atagaaaatg atgatagagt ttagttaaaa     480
aaattcacac ataaaattac agttaaaaaa attcacacat aaaatagagt gtttgcatag     540
caagacatta ttgcccttca gcctggcaga aaaacataaa ctcaggtgta tattttataa     600
taaacattgt attgaatgct aagaatgata cactgttgaa catctcctga atggtttgcc     660
ttcttgtaaa tcataccaat tgtttagaca attgaaattc caagctcttt ctcttctccc     720
atataaaaac caacagaaac anggaggctg ttagtagcaa gctcctcatg ggaaanggt      779
```

<210> 141
<211> 986
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(986)
<223> n = A,T,C or G

<400> 141

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aanccnnnnn ntttatttgg gnaaacccaa ttgggnaaaa ttnaacccgn ccccccnaaa      60
ngccctttttn gggggttnaa ccccccggaa aacccttttcc gggggggaaat tccccaacct     120
ttaaagnttt aaaaacccgg gggccccggg cccccaaagt ttgggttggc cnttgggggga    180
aaaatttttt ccgggccccc cnttttaaag cccggttggg gtttccggcc ngggggcccc     240
gggaaagggt tnaccctttt tttttaact tttttnnntt tcctttttn nttcctttt        300
tttctttttt tttttctttg gtntnnnttt ttttttcaat tttttggttt ttggtttttg     360
gttatggttt ttttagaaca ggggtcccac tctgtcaccc aggctggagt gcagtggtgc     420
aatcacaggt cactgaaacc tcccacctag ctgggactag aggtgcaggc caccacacca     480
gctaatttat gtaattttg tagagacgag tttcaccacg ttacctaggc ttgtcttgaa      540
cacctgggct caagcaatct tccagcccca gcctcccaaa gtgctgggat tacaggtata     600
aaccacaatg cccccgtttt tactctttac tgcatccttc ccatcagtat taattcctca     660
gaaatttagt acccctgtgc ttcattcagt atcagtaacc ctgcaatgat ttttacaaat     720
atctttttct agtgggtttt ttacttagag gaaagaactt tgtaatagct cttaatgttt     780
atatataaga gaagacagaa tggaaaatgt tttttgaagt caaatattgc atgatgtaaa     840
gaaaaaactt taaacttaaa tgagtanggt tgtcctgaat tacactggta actctctact     900
tctttattaa agaagttata gtaagatgcc tttggntacc tgatttcagt gtacctgccc     960
gggccggccg ntcaaaaggg cgaant                                          986
```

<210> 142
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 142
gggcccgtan agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gcccgggcag gtacactgaa atcaggtaac aaaggcatct tactataact 120
tctttaataa agaagtagag agttaccagt gtaattcagg acaacctact catttaagtt 180
taaagttttt tctttacatc atgcaatatt tgacttcaaa aaacattttc cattctgtct 240
tctcttatat ataaacatta agagctatta caaagttctt tcctctaagt aaaaaaccca 300
ctagaaaaag atatttgtaa aaatcattgc agggttactg atactgaatg aagcacaggg 360
gtactaaatt tctgaggaat taatactgat gggaaggatg cagtaaagag taaaaacggg 420
ggcattgtgg tttatacctg taatcccagc actttgggag gctggggctg gaagattgct 480
tgagcccagg tgttcaagac aagcctaggt aacgtggtga aactcgtctc tacaaaaatt 540
cataaattag ctggtgtggt ggcctgcacc tctagtccca gctaggtggg aggtttcagt 600
gacctgtgat tgcaccactg cactccagcc tgggtgacag agtgggaccc tgtctaaaaa 660
aaacataaca naacanaacn naatgaaaaa aaaaacaaga aaaaagaata gaaaaagaaa 720
aaagtnaaaa gtncctcggn cgcgaccacg ctaagggcga attccagcac actgcggccn 780

<210> 143
<211> 794
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(794)
<223> n = A,T,C or G

<400> 143
nnnnnnnnnn nnnacnnttg actgataccc aacttggtac cgactcggac cactagtaac 60
ggccgccagt gtgctggaat tcgccctttc gagcggccgc ccgggcaggt acagaaagaa 120
gagccaggat attctttgtt ttcctaagcg tagctgtgag caacattatc tctcctactg 180
gcttctttga ggtatgagag tcatcattac atctgtgtgc tttgtcaagt tatatgtcac 240
aattccacct gtgggtagag aacaagcaca agagtcacat caactgtgtg ctgggccagg 300
gttatgtcac aatcttccct gagagcatgc accaggcaga agagtcacat cacagggttc 360
tcaaccagag atgttacaat cctctcctga aagcaggaca caggaaaaag agtaagatca 420
cctgcatgct gggctcagat atatgtcaca agactcactg tgggcaaagt ccagaaggac 480
agacagaaca gctggttgct tgacccagca atatgtcaca atcttctcta tgggcagaat 540
gcaggcagaa gtagagggct tcatcttcca ggtgatggat taaaaaaata catcccaagg 600
ctctctgtgg gaaagggctc angcagaaac tttccaaccc ctangtgttt gcttcagtga 660
tatgtcacaa ttaaccaaaa tatgcaggtt tcaagcaagt gagtnaagtc atatcaccta 720
nggtgcttgg tccanaaatc tgncacaatc tttttttttt ttttggcatg cccagcngaa 780
ttgaaaagtc ncan 794

<210> 144
<211> 782
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(782)
<223> n = A,T,C or G

<400> 144

cnannggggcc cntagagcat gctcgacggc cgccagtgtg atggatatct gcagaattcg 60
cccttagcgt ggtcgcggcc gaggtacaat cttggctcac tgcaacctcc acctcccggg 120
ttcaagcaat tctcctggct cagcctcctg agtgctggga ctacaggcat gcaccaccac 180
tcccacctaa ttttgtattt ttgatagaga cggggcttct ccatgttggt caggctgttc 240
tcaaactcct gacctcaggt gatttgactg tcttagcctc ccacagtgct gagcttatag 300
gcaggtgcca cgacacctgg ctggaatcat ttatttcaac atatctctgg gtccaacaac 360
atggtgatgc aactttcctg catgggccct cccacagaaa tactctaata catcttttca 420
ttcattatct tggtgatgtg acttttctat tctgcttggg cactgccaaa aaaaaaaaaa 480
aagattgtga cagatttctg gaccaagcac ctaggtgata tgactttact cacttgcctg 540
aaacctgcat atttggtta ttgtgacata tcactgaagc aaacacctag gggttggaaa 600
gtttctgcct gagcccttcc acagagagcc ttgggatgta ttttttaat ccatcacctg 660
ggagatgaaa ccctctactt ttgcctgcat tctgcccata gagaagattg tgacatattg 720
ctgggtcaag caacccagct ggtctgctgt ccttntggac tttgcccaca agtgagtttt 780
gn 782

<210> 145
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 145
annnttgacc tgatacccag cttggtaccg agctcggatc cactagtaac ggccgccagt 60
gtgctggaat tcgccctttc gagcggccgc ccgggcaggt acttttttta cttttttttt 120
cttttttttt ttggacatct gttttcactc ttaggctttt aaacaatagt tattgctttt 180
atccctctca gattctaata actgagagcg atggggctat attgaatctc tgtatgcact 240
gagaactgag ctatgaagag gatcttatta aactgctggt ctgactttat ggattgacac 300
tgttcctttc ttttattgtg aaaaaaaaaa aaaaccctga aagtcttggg aaccccctaa 360
agtcttttgg gaatcctcaa aaagcatggg aagttaagta tttagctaca taaatgttgt 420
aagatcatat cttatgtata gaagtaataa gaccatttgg aattactgga ctaattgaat 480
agttaagggt tctattcggg acaataaaat gtatttgaa agtgctgcta actattgatg 540
ctgacagtgt ttcactccta tgagtgaccc aaacatatta taaatatgtg gtaaagggaa 600
tggagcctgt ggggttgagc agaatgttgg acttttttt tnnnnnnnnn ntttttngc 660
ttnctattng atngataacg atttcnggat tncctttaaa nncncngang gtttggaaac 720
tttggactgg attctggttc ccngaaacag gttcactggg nnccggggga cacttttaan 780

<210> 146
<211> 778
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(778)
<223> n = A,T,C or G

<400> 146
ttgggcccnt agagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg tacatggagg cctggactgt aaagagacta cggaaggggc 120
agcatgtgtg ttttgcttct cagattcatt gtcactcacg ttgcataaag tcctcagttg 180
tttttaagta attgttttac tatggatata ttaaacatac agaataaaaa agggaataaa 240
catacaattt ggcaaacccc ctactgagcc tttaaaaata ttagaaggtt ggtattaaac 300
caggtaactt acggatttgg aaaaaaaaaa aaaaagaaag cattgaatat ggctgggcgg 360
ttctctgggg atccttgggc agacccagtt tgccccgatt tctcactgta gttttcaaga 420
ataactgtag gaggcggtgg gagtgcagca tcctgagata agggagacga gccagaacag 480
cgcgggcact gttccagccc ccctagaaat gggttgatct tcagtgcttc agctcagtgt 540
gtcatgcttc acccacgatg taaaagccta ggatcggagg cttccccagg gttcgtcagc 600
tgtggcacaa tagggcccgt tgcaaataag attctattcc tgtcagacag tttcgtgagt 660

ttgtggggga acactcaccc tagcttctgn tgnctcttca tgcctgtgtg ttcctaatca 720
actttttttgn gtaacttggt gttttgaaag tgtcaccagc acacaatgga acctgtcn 778

<210> 147
<211> 784
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(784)
<223> n = A,T,C or G

<400> 147
acnntatgac ctgattacgc caacttggta ccgactcgga ccactagtaa cggccgccag 60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg tacttttttt tttttttttt 120
ttttttttg ggattgaatc aacatgcttt aataggaaaa gatgtatggg ctatatatgn 180
atcaatctgg ngaancctcg ntctaataaa gggtcttttt cttttctatg atacacacag 240
ncacgctgat aatatgcnaa tgaacatttt cctttatgnc tctncanata atggttattg 300
gctgaggnaa attaaattcc caccanggnt tgctgncagt attttaacac ccacattagt 360
atatgcntnc agggtcataa ccccctaaaa tccatnatgc aaccttatta atctggcttg 420
ggantccngg ttaatgcttg gatttanttc ctgattacac tncntngaaa agtgagacat 480
ttgncattcc caactttggg aaaaccaact tatattcaac cntntnaatg aaggccatct 540
tgatggnctc aacactaatt tttatgatgc aaatttatac acngattttt gtaaagggca 600
aagttttaaa agcgtattta acttgatggt ttctatcagc attaatnaaa tggncatgaa 660
taggcattaa aaacagttgc cagtgatnat ctgcatgaaa ggaaaaagaa ccctgcaaat 720
ggctattgaa nttggaaata ttggntttga natgtaagaa aatntttaga aagctcncnc 780
tgng 784

<210> 148
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)
<223> n = A,T,C or G

<400> 148
gggcccntan agcatgctcg acggccgcca gtgtgatgga tatctgcaga attcgccctt 60
agcgtggtcg cggccgaggt acaaagcact gtttaaaacc agtccaagat acttaatcca 120
aactgtatca tgattcttca ttagaaatct agacaccact catggtggtt tcttacactt 180
taaaaagttg aggcattttc agtgtgagca ttctgaatat ctcttacata tcaaaaacaa 240
tacttccaac tcaatagcca tttgcagggt tctttttcct tcatgcagat tatcactggc 300
aactgttttt aatgactatt catgaccatt ttatttatgc tgatagaaaa catcaagtta 360
aatacgcttt taaaactttg tcctttacaa aaatcagtgt ataaatttgc atcataaaaa 420
ttagtgttga gaccatcaag atggccttca tttatatggt tgtatattag ttggttttcc 480
cagagttggg aatggcagat gtctcacttt tctatgtagt gtaatcagga aataaatcca 540
agcactaaac aggaatccca agacagatta ataaggttgc atgatggatt ttagggggtt 600
atgaccctgg acgcatatac taatgtgggt gttaaaatac tgacagcaag ccctggtggg 660
aattaattta cctcagacaa taaacattat ctggagagac ataaaggaaa atgttcattt 720
gcatattatc agcgtggctg ggtgtatcat agaaaaagaa aaagaacctt tttan 775

<210> 149
<211> 783
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(783)

<223> n = A,T,C or G

<400> 149
acnntatgac ctgatacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacccgatta aaccagagca 120
aaaactacct tctgcaggtc agggagctaa tgacatggca ttggccaaac gttcccgcag 180
tcgaactgct acagaatgtg acgttcgtat gagcaagtct aagtcagaca atcagatcag 240
tgacagagct gctttggagg ccaaagtgaa ggatcttctc acgctggcaa aaaccaaaga 300
cgtagaaatt ttacatttga gaaatgaact gcgagacatg cgtgcccagc tgggcattaa 360
tgaggatcat tctgagggtg atgaaaaatc tgagaaggaa actattatgg ctcaccagcc 420
gactgatgtg gagtccactt tattgcagtt gcaggaacag aatactgcca tccgtgaaga 480
actcaaccag ctgaaaaatg aaaacagaat gttaaaggac aggttgaatg cattgggctt 540
ttccctagag cagaggttag acaattctga aaaactgttt ggctatcagt ccctgagccc 600
agaaatcacc cctggtaacc agagcgatgg aggaggaact ctgacttctt cagtggaang 660
ctctgcccct ggctcantgg gaggatctct tgagtcagga tgaaaataca ctaatggacc 720
attagcacag tacttcatgg caatttagac agtgagtgca atgaggtcta ccagcccctt 780
ann 783

<210> 150
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 150
gggcccntan agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tactgtgttg gttctcttcc atctggtgta tccgttcagt 120
caggcaagcc acggacactt cactggcatt cccgctgctc cccttccggg agcgctctat 180
gctggggatg ccttccgact ctgaggagga tggtgcatcc agcgcatcat cgctcgatgt 240
gaggggctgg tagacctcac tgcactcact gtctaaattg tccatggagt tactgtgctg 300
atggtccatt agtgtatttt catcctgact caagagatcc tccactgagc caggggcaga 360
gccttccact gaagaagtca gagttcctcc tccatcgctc tggttaccag gggtgatttc 420
tgggctcagg gactgatagc caaacagttt ttcagaattg tctaacctct gctctaggga 480
aaagcccaat gcattcaacc tgtcctttaa cattctgttt tcatttttca gctggttgag 540
ttcttcacgg atggcagtat tctgttcctg caactgcaat aaagtggact ccacatcaag 600
tcggctggtg agccataata gtttccttct cagatttttc atcaccctca gaatgatcct 660
cattaatgcc cagctgggca cgcatgtctc gcagttcatt tctcaaatgt aaaatttcta 720
cgtctttggt ttttggcagc gtgagaagat ccttncttgg nctcnaagcn g 771

<210> 151
<211> 778
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(778)
<223> n = A,T,C or G

<400> 151
acnntatgac ctgatacgcc agcttggtac cgactcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgcccttt gagcggccgc ccgggcaggt actttttttt ttcttttttt 120
acatctgatt ttaatgcttc gttaacttca aaaggaactg gtagagttca gaaggtgagc 180
tgttgttttt ctaaacctct tcccaggaag gagacattga cacttgaatt tttgccacct 240
ttttcctcat tagaaggaaa gtagaaagcc ttactgtagg atttttaaaa aaaaatccat 300
ctcaccccat attggtctta aataagtata gactaattaa cctaagctac ctttaacaac 360
gtagaattta gatgggttca tatatgtgag aaaaacctga atataggaca ggggtcctac 420
ttttttcccc acctctgccg cccaggctag agtatagtgg tgtgatcttg gcccactgca 480

acctctgctt cctaggttca agtgattctc ctgcctcagc ctcccaagta gctgggattg 540
taagagtatg ccaccacgcc cagctacttt ttgtattttt agtagagaca gggtttcatc 600
atgttggcca ggatggtctc ttaactcctg ccctcaaagt gatccaccag agaggagatc 660
ctcggcctnc ccaagtgctg ggattatagg catgagccac cgtacccagc ctactttcta 720
attaattaaa aaaaaannnn nnnnaaaaaa aacttnccaa atgagctgat aaaaacng 778

<210> 152
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 152
gggcccntag agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac catgctgact tcttggtatc ttttaaggcc taattttccc 120
ttccttgaga ttactgtagt gtgttccagc taatttctat ttggaaacga gttggaacag 180
ctgaaaacta ggtattattg aaggcaaagt agcctcacgt cagtttttta tcagctcatt 240
tgggaagttt tttttttttt tttttttttt tttaattaat tagaaagtag gctgggtacg 300
gtggctcatg cctataatcc cagcacttgg ggaggccgag gatctcctct ctggtggatc 360
acttgagggc aggagttaag agaccatcct ggccaacatg atgaaaccct gtctctacta 420
aaaatacaaa aagtagctgg gcgtggtggc atactcttac aatcccagct acttgggagg 480
ctgaggcagg agaatcactt gaacctagga agcagaggtt gcagtgggcc aagatcacac 540
cactatactc tagcctgggc ggcagaggtg gggaaaaaag taggacccct gtcctatatt 600
caggtttttc tcacatatat gaacccatct aaattctacg ttgttaaagg tagcttaagt 660
taattagtct atacttattt aagaccaata tggggtgaga tggatttttt tttaaaaaat 720
cctacagtaa ggntttctac tttccttcta atgaggaaaa angnggcaaa at 772

<210> 153
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 153
acnntatgac ntgaatacgn ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc cttagcgtgg tcgcggccga ggtacttttt tttttttttt 120
tttttttttt tttagttaaa gaatgcttta ttaatacaaa tacacacaaa ctctgaagca 180
ctaagaaatt taaatatcta tgtcacagca aacaggtggc aattcaacat ccagggtcga 240
cagaatgctt gaaggagact gcaacagatt ggattcccat ggtggagagg gcatnttcac 300
aggtgaaggg gggcccagct gaaacagctt ttcaagctct ctctcctcgt caaggatcat 360
gagaggcact ccactcaagg ggaggtgcgc aatctggtgc tcttcaggca ggtcaaaact 420
ctcaaagtct agaggattga agggaaagaa tttttctatt tctggatagg catcatctga 480
ggcaggaaca gagctttttg ctttaacagt cttctcagtc atctttttgg cagaaaagct 540
tggctgtttt tgtttgaggg gtcccttggt ctttacagac ttttctgtag ctctgttgac 600
agttcccaaa gcctttctag tagctttagg taaggctggt ggggcatcga acgttttgcc 660
aaaacgtggt gttgaaactt gagatctccc atctaangct ttgattgaan gtccagaccc 720
cagcttcagc ccatccttag caaccacacn ggtgcctggg tctncatttt ccttatnang 780

<210> 154
<211> 770
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(770)
<223> n = A,T,C or G

<400> 154
gncctgtnna gctgctcgag cggccgccat gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt acgcggggac cgcggcctca gatgaatgcg gctgttaaga 120
cctgcaataa tccagaatgg ctactctgat ctatgttgat aaggaaaatg gagaaccagg 180
cacccgtgtg gttgctaagg atgggctgaa gctggggtct ggaccttcaa tcaaagcctt 240
agatgggaga tctcaagttt caacaccacg ttttggcaaa acgttcgatg ccccaccagc 300
cttacctaaa gctactagaa aggctttggg aactgtcaac agagctacag aaaagtctgt 360
aaagaccaag ggacccctca aacaaaaaca gccaagcttt tctgccaaaa agatgactga 420
gaagactgtt aaagcaaaaa gctctgttcc tgcctcagat gatgcctatc cagaaataga 480
aaaattcttt cccttcaatc ctctagactt tgagagtttt gacctgcctg aagagcacca 540
gattgcgcac ctccccttga gtggagtgcc tctcatgatc cttgacgagg agagagagct 600
tgaaaagctg tttcagctgg gcccccccttc acctgtgaag atgccctctt caccatggga 660
atccaatctg gtgcagtctc ttcaagcatt ctgtcgaccc tggatgttga attgccacct 720
gtttgctgtg acatagatat ttaaatttct tagtgcttca gagtttgngg 770

<210> 155
<211> 767
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(767)
<223> n = A,T,C or G

<400> 155
acattatgac tgatacgcca gcttggtacc gactcggatc cactagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac gcgggcccgc tggataactg 120
ccctgggaca cagcagcggg aagccgcctg cagactgaac ctcactgacc caggtggaaa 180
tcgttaggtc atttactgct aagcagccag atgaactctc cctgcaggtg gctgacgtcg 240
tcctcatcta tcaacgtgtc agcgatggct ggtatgaggg ggaacgacta cgagatggag 300
aaagaggctg gtttcctatg gaatgtgcca aggagataac atgtcaagct acaattgata 360
agaatgtgga gagaatggga cgcttgctag gactggagac caacgtgtag tctctcagat 420
ggtcttttgt tactgcaaga tttgcacgac acttaccggg ctggttggtt ctgggctagt 480
tttattgnta attttgtcac agcctattta attaaaagaa cgaaaacact tgcctttaag 540
cttgccaggt tgttctgctc tctcatgaga agagcttgga tacagtgagt ttgcacagct 600
cagtttttac ctaaccacac acttgcagac ctnctgaggt acctgcccgg gcggccgctc 660
gaaanggcga attctgcaga tatccatcac acttggcggn cgctcgaaca tgcatctaga 720
nggcccaatt cgncctatag tgagtcgtat tacaattcac tggncgc 767

<210> 156
<211> 827
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(827)
<223> n = A,T,C or G

<400> 156
attgggcccc tagatgcatg ctcgacggcc gccagtgtga tggatatctg cagaattcgc 60
cctttcgagc ggccgcccgg gcaggtacct caggaggtct gcaagtgtgt ggttaggtaa 120
aaactgagct gtgcaaactc actgtatcca agctcttctc atgagagagc agaacaacct 180
ggcaagctta aaggcaagtg ttttcgttct tttaattaaa taggctgtga caaaattaac 240
aataaaacta gcccagaacc aaccagcccg gtaagtgtcg tgcaaatctt gcagtaacaa 300
aagaccatct gagagactac acgttggtct ccagtcctag caagcgtccc attctctcca 360
cattcttatc aattgtagct tgacatgtta tctccttggc acattccata ggaaaccagc 420

```
ctctttctcc atctcgtagt cgttccccct cataccagcc attggctgac acnttgattg   480
gatgaaggcc ancttanncc nactngcagg gagaagtcaa tttgnttgnt taaccnntna   540
atggancctt accnanttnc acctggggtc aagtgagggt tcaagtctgc angcggcttc   600
ccgctgctgt ggtcccaagg gcaagttatn cagcggggcc cgcgttacct tgggccgggg   660
accaacgcct taangggccg aaatttccaa gcacacttgg ccggcccgtt acctagtggg   720
atnccgaact tcgggtaccc aaagccttgg gcgttaatca atgggtcaat aggcttggtt   780
tcctggtgtg naaaattggt aatccggttc acaanttccc cacaaca                 827
```

<210> 157
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 157

```
aacactatga cctgatacgc canettggta ccgnctcgga tccctagtaa cggccgccag    60
tgtgctggaa ttcgcccttt cgagcggccg ccgggcaggt acataatctg gaaatttatg   120
ttacaggtat gcatatttgt atatgaaaaa tattaactga gaaattactg agcttcttag   180
caaaaaatat aattatttca gagatatgat acagtttaat atctgccttc ctcaaaaagt   240
cagaaaataa aaagttttaa attgcatata ttttcatttc ttacatatgt cagaacactc   300
agaattttta ataaaatgtt ttaaaacata attataagtt gttactttta tttctatggt   360
tagtggaacc cacagggtcc tgtatctgat taaatggagg atatattagg agaatttttt   420
agaagaatga cacatgtgac ataccaccat atttgcaaga aaatataact tgatagtaga   480
gtaagttagc tgctttatat gatgaattaa aggcactagc tcttagaaaa aaaaggatta   540
aaatgctgac ttcagtaata atgtaaggag ctctgctctt taacatttcc taattaggta   600
taaactatga tggaagggaa aggtggaatg gaagtntcta cntnttacca ttggctttcn   660
ttcatgaaat tggcagnnag cctnccattt cnnnaggnct ttaatnaaaa anttttttccc   720
aacttttnct tttcnaaaaa nttnttnncc nnatngnnaa ctggnggtna aaacccggct   780
tttttggggg gaaancctac ctggntnggg naaaaant                           818
```

<210> 158
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 158

```
ntgggcccnt nnagcatgct cgacggccgc cagtgtgatg gatatctgca gaattcgccc    60
ttagcgtggt cgcggccgag gtacttcaac cacccctcct acaaaactct ataccccttgt  120
catattaaaa ttgtatgtta tgccaggctt ccctaataca acaaaatctc tgaataaaac   180
ctattaaata tacaatttct atcaacatgc ctgccacaca tgcttaataa ttgcttagtg   240
aatacaagat taatgcatga gtgcctaagt tacttcatct agtataacaa atgacaatat   300
ctcatttgtt tcccgaagta tccttattcc attcaagctc tgaagaaagt attaatgata   360
ttcgtcctta agtaattttt tctgcattca aatctcacca ttcaaatgat tttccaacag   420
tagtttcccc aaaagcagtt tacacagtta catttgttat aatttttgaa agaaaagttg   480
ggaaaatttt attaagactc tgaatgtagc ttactgccaa ttcatgaaga aagcaatgta   540
atacgtagat acttcattcc acctttccct tcatcatagt ttataactaa ttaggaaatg   600
ttaaagagca gagctcctta cattattact gaagtcagca tttatacttt tttttctaag   660
agctagtgcc tttaattcat catataaagc agctaactta ctctactatc aagttatatt   720
ttcttgcaaa tatggtggta tgtcacatgt gtcattcttc taaaaaattc tg           772
```

<210> 159
<211> 1024
<212> DNA

<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 159
```
ttgggnaaaa ttttaaaccg gcccccccaa angncccttt ttgggggntt aaaccccccg     60
gnaangcccc tttccggggg gggaaattcc ccccaaccct ttaaaggttt aaaaacccgg    120
gggccnccgg gcccccccaaa ggtttgggtt tgggcccttt ggggggaaaa aattttttcc   180
gggccccccc ntttttaaag gccgggttgg ggggtttccc gggcccgggg gccccccgga    240
aaaggggttt aaccccccttn aattttttttn gggtttttcc cccccaaatn gggtttccaa  300
ttttttttt tttaaaaaac ccaaaanggg aaaaaaaggg gttggcccaa aatttaaggg     360
cctttctttc aaaagggttt cctttgggaa aaaaaaacct tgggttgggg gaaaaggttt    420
ncccaaaaat ttaaacctgg gaaaaccttc tttgggnaac ccactttaaa aatttaaant    480
taaanttaaa tttaaattta aanttaagga atgggnttgg aaaaaaaaag gaatattccn    540
ttaatttggc cttaattttt taatttgntn atttgactgg tnatgnnttt acttttnaaa    600
aacntnctnn ccaaaaacca attttacntg gncnngtggg atttaccntn ttcnattacc    660
ngggagttaa cccaactnga acntttngga gggnccagtc ctccataggg acctccntca    720
nttntgatnc caactgcaag ttcagggaaa ttctcacatc cccccttgggc natatatctc   780
tttaaaagcn cctcacagca ctcactgaan tctattatat tatagatang gtntattatg    840
ggaaangggt nacanntcaa natnncccaa cgcggggana cacanngngc agngcccgat    900
gatnttccna nacacagant ttggtgttct ctggagncgt ttcccccnta gnaaaatgtt    960
gacacntgga cagagttttt acccccaggg gaacgtnaat caatctttgg aagtttcaaa   1020
tcag                                                                1024
```

<210> 160
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 160
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gggcctctnn agcatgctcg agcggccgcc agtgtgatgg atatctgcag aattcgccct     60
ttcgagcggc cgcccgggca ggtactgtaa gttattttct tccttatctc ccaatgacac    120
tgttttctac atgaaaaata ccattttggc tttatcaaca tgttattaat tcataatatg    180
agagatctat cagcactatt tgtaaaaata ttcaattaaa aaaattaaga tgatttatag    240
ttgtgtggta aagaatttga ccttacccaa aggaggtcag gcttttgccc tcagccttaa    300
ggagataatc ttgtcatacc caataaaagt gttattttaa agtgaggctg actacacctg    360
ataatccagc ttgagggaca gttatgccag tttgaccaac tagatgattt agggagcttt    420
ctctcccaac ttcaaagctg tgatgaatca aacaggtaat taatcgatca tgcttatgta    480
atgaagcctt gattgaaact tcaaagattg attgacgttc cttggttggt aatactctgt    540
catgtgtcaa ttctagaagg gtaatacgtc ctgaggataa cagaagctct gtgtttggaa    600
tcatcctgga ctctgcactt tgnttctcct gctttggctg attttgatct gtaaccttta    660
cctataataa accataacta taatataata gatttcagtg agtgctgtga ngctttctag    720
tgatttattg aacctaaggg tggatgtgag aatttnctga acttgcagtt g             771
```

<210> 161
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 161
acncttgacc tgatcgccag cttggtaccg actcggaccc tagtaacggc cgccagtgtg 60
ctggaattcg cccttagcgt ggtcgcggcc cgaggtacag aatttattat gaaatagctt 120
aatggcaagt ggtaatttag aagaattaag ttatcagata ggagatatat taaaatattt 180
aaaaattgga tatattcttg aagccctttt acacaagtaa tttctataat ttgattgtaa 240
tgaaagtata atataccttg ttactattat cagattaatt tttgaaagta gaattcctta 300
atcaagccaa ggttatgctg ctttataaga aattaatcag gtagtttaac actagagctc 360
attagccaac ctgtatgtag cacaaaataa tcatctctga taaataccta taaatatatt 420
ttattcatac ttttaaatat tttacaattc aaataaaaac cttatatgta gacaatctgg 480
gctaaatttc catgtatgtt ttgaaaaata atgttagcat gaatagattc atatttaaat 540
atgattttaa atactcttaa tagaggagac ataagaaata tttacataaa agctaagtag 600
catgatacag ctcatggtta ttttcctcat aggaaaacaa ttacttgatt tttttttgca 660
taggattaaa gactgagtat cttttctaca ttctttttaac tttctaangg gcacttctca 720
aaacacagac caggtagtaa atctncactg ntctaaggtc tcacccccact t 771

<210> 162
<211> 768
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(768)
<223> n = A,T,C or G

<400> 162
gggcccctnn agctgctcgn cggccgccag tgtgatggat atctgcagaa ttcgccctta 60
gcggccgccc gggcaggtac tacaaaaaca gaataatttt gaagttttag aataaatgta 120
atatatttac tataattcta aatgtttaaa tgcttttcta aaaatgcaaa actatgatgt 180
ttagttgctt tattttacct ctatgtgatt atttttctta attgttattt tttataatca 240
ttatttttct gaaccattct tctggcctca gaagtaggac tgaattctac tattgctagg 300
tgtgagaaag tggtggtgag aaccttagag cagtggagat ttactacctg gtctgtgttt 360
tgagaagtgc cccttagaaa gttaaaagaa tgtagaaaag atactcagtc ttaatcctat 420
gcaaaaaaaa atcaagtaat tgttttccta tgaggaaaat aaccatgagc tgtatcatgc 480
tacttagctt ttatgtaaat atttcttatg tctcctctat taagagtatt taaaatcata 540
tttaaatatg aatctattca tgctaacatt atttttcaaa acatacatgg aaatttagcc 600
cagattgtct acatataagg tttttatttg aattgtaaaa tatttaaaag tatgaataaa 660
atatatttat aggtatttat cagagatgat tatttgtgc tacatacagg ttgggctaat 720
gagctctagt ggtaaactac ctgataattt cttataaagc agcatacc 768

<210> 163
<211> 776
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(776)
<223> n = A,T,C or G

<400> 163
nantatgacc tgatacgcca acttggtacc gactcggatc cactagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac tcttccgcag agggaaggct 120
gtagaagtct ttgcaagctt catacagaga aatacaaaag gtgtgatgcc attaactggt 180
cctttctaaa gcattaggaa tttagtgaaa ctctcaaaca caaaactgaa aagccatttg 240
aacaaatctc atatacttgt agataagctt ttttttattt aaagcataca aattcaaatc 300
tttcaagcag aaaattcagt caagtgagat ccattggtgg tttgagttca aagtcagtga 360
gcaaatggaa atcattgcgg catctctctc atttccctag tggacattag accactcaaa 420
atgtgtcaca taatttacag ccccttggta gtaattgaat atacacgttg agagtgcact 480
ggcagaacac ttaagaaaga ttgaatgcag gaggaccagc ttacgttatt tttggctcta 540
ctctggtttt tgcttttaat gtttttcttt gagattaatt tcaattgggt tgttccatcc 600
tattcaaaca aatgctttga gagaagagat gaacagcagc atcaaataaa attgtgatat 660

ttagtttnag agacatcang tgttgtaatc aaataagaca gaanggccaa gttaaaatct 720
gtgattngca taaatgaatt taactgttag aatagcanaa ttgagaggtn gattan 776

<210> 164
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 164
cgggcctcta gatgctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcgccg cccgggcagg tacacagtgg ataccacata ctcgctctga ggaagaagga 120
ggaggagaaa gaggagaagg aaggaaattt tcaaatgaca atttctatca ggactcattt 180
tcctattata agttcagaat acttggacgt ctttataaaa tcaagttgaa atctctacta 240
ttttgatctg tattctctta aatattaaag gttataccta gggagattcc atgttgactg 300
gcaaacaaag cataccattt taagaataac tcttcataaa atatgtgtct aagaattaaa 360
agtgtctagt aacagataca caaaagagag atttagaata attaatattt aaagacagat 420
aattttaatg tttcacactt ttaactacaa aattctttgt tttcctaaat attagcaaaa 480
atgttatata ttaaaataaa tcttgaaaat ctcacccctac atttagataa tagttcaaaa 540
gtcatattgc taatctacct ctcaattctg ctattcttac agcttaaatt catttatggc 600
aaatcacaga ttttactttg tccttctgtc ttatttgatt acaacacctg atgtctctga 660
aactaaatat ccaatttatt tgatgctgct gttcatctct tctctcaaag cattngtttg 720
aatangatgg aacaacccaa ttgaaattaa tctcaaggaa aaacattaaa ant 773

<210> 165
<211> 783
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(783)
<223> n = A,T,C or G

<400> 165
tnnnnnacac tatgacctga ttacgccanc ttggtaccga ctcggatcca ctagtaacgg 60
ccgccagtgt gctggaattc gcccttagcg tggtcgcggc cgaggtacag taggaaaata 120
agaataacaa cgggcaaaat ctttttagaa catttatgct ttatctgttt tagcttctaa 180
aacaatcctg aaggatgaat aattatcatg agtatagcag aatttaattt tccctgttgc 240
tccaaaattt taatgaaaac tttacggttg agagaaatag gtaaataaaa aaacttccta 300
aaattctaaa gacaattgtt gaataaaatt taagtgaatg agtttgtgct tcatatttaa 360
cttttaactt tccaataggc tttattaaat ggaaaactga aatttacaaa gtcttagagt 420
agaagcattt ttatcctggc tagggattct ctaagagaac cagtagcacc aagatgcact 480
ggaacagtgc aacgagagag ttcatgcctt agggtttaga agcatacaag caaagggaat 540
ggtgcccact tcttactaga aaaatttcac aggctggagt ctgggcggag gagcctggga 600
tgacagtaga agtgtgcagg aagcactaag tctagcctgt acctgcccgg gcggccgctc 660
gaaaggcgaa ttctgcagat atncatcaca ctggccggcc gntcgagcat gcatntagag 720
ggcccaattc gcctatagtg ancgtattac aattcactgg ccgcgtttta caacgtnnng 780
cnn 783

<210> 166
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)

<223> n = A,T,C or G

<400> 166
attgggcctc tnnagcatgc tcgagcggcc gccagtgtga tggatatctg cagaattcgc 60
ccttcgagcg gccgcccggg caggtacagg ctagacttag tgcttcctgc acacttctac 120
tgtcatccca ggctcctccg cccagactcc agcctgtgaa atttttctag taagaagtgg 180
gcaccattcc ctttgcttgt atgcttctaa accctaaggc atgaactctc tcgttgcact 240
gttccagtgc atcttggtgc tactggttct cttagagaat ccctagccag gataaaaatg 300
cttctactct aagactttgt aaatttcagt tttccattta ataaagccta ttggaaagtt 360
aaaagttaaa tatgaagcac aaactcattc acttaaattt tattcaacaa ttgtctttag 420
aattttagga agttttttta tttacctatt tctctcaacc gtaaagtttt cattaaaatt 480
ttggagcaac agggaaaatt aaattctgct atactcatga taattattca tccttcagga 540
ttgttttaga agctaaaaca gataaagcat aaatgttcta aaaagatttt gcccgttgtt 600
attcttattt tcctactgna cctcggccgc gaccacgcta agggcgaatt ccagcacact 660
ggcggccgtt actagtggat ccgagctcgg taccaanctt ggcgtaatca tggtcatagc 720
tggttcctgt gtgaaantgt atccgntcac aattcacaca acatacganc cggag 775

<210> 167
<211> 797
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(797)
<223> n = A,T,C or G

<400> 167
ttgnaacnat tntgacctga ttacgccaac ttggtaccga gctcggatcc actagtaacg 60
gccgccagtg tgctggaatt cgcccttagc gtggtcgcgg ccgaggtact ttcagaaggt 120
aaatcagtag atcacccatg tgtatctgca ccttctcaac tgagagaaga accacagttg 180
aaacctgctt ttatcatttt caagatggtt atttgtagaa ggcgaggaac caattatgct 240
tgtattcata agtattactc taaatgtttt gtttttgtaa ttctgactaa gaccttttaa 300
ccatggttag ttgctagtac ccttccttgt ccgaaggagc tgaccagtat tgatgagaga 360
gtccaggcag ctcctgaagt tcagctggta gtttgttctc tgaacatttg gtctcttgaa 420
ggcacagtat atctggggct tcttccttta cccaatctaa tcctttcttc ttaatccagg 480
ctcgaagccc atncacattc caagagcaga tcttgagtgt ggcaggtttg ccactgggtg 540
aggttttctg atctgggggg tcctcataca gggctggggc cctntcctgc tgcctctttg 600
tcattttctt tgcgggccgt cttactcttc ttggcctctg gcttctgtcc tgagctcatc 660
cccgtctttc ggccaccngt tcccctttt tacacgcctt cggcatttcc cgttaccgaa 720
cgcccttgg gcagctgtac ctgccccngg cggccgttcg aaaaggccna attcttgcag 780
aatttccatc ncaccnn 797

<210> 168
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 168
acantatgac ctgatacgcc aacttggtac cgactcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta ctccggtcgg tgtcagcagc 120
acgcggcatt gaacattgca atgtggagcc caaaccacag aaaatggggt gaaattggcc 180
aactttctat taacttatgt tggcaatttt gccaccaaca gtaagctggc ccttctaata 240
aaagaaaatt gaaaggtttc tcactaaacg gaattaagta gtggagtcaa gagactccca 300
ggcctcagcg tacctgcccg ggcggccgct cgaaagggcg aattctgcag atatccatca 360
cactggcggc cgctcgagca tgcatctaga gggcccaatt cgccctatag tgagtcgtat 420
tacaattcac tggccgtcgt tttacaacgt cgtgactggg aaaaccctgg cgttacccaa 480

cttaatcgcc ttgcagcaca tccccctttc gccagctggc gtaatagcga agaggcccgc 540
accgatcgcc cttcccaaca gttgcgcagc ctgaatggcg aatggacgcg ccctgtaacg 600
gcgcattaag cgcggcgggt gtggtggtta cgcgcagcgt gacccgtaca cttgccagcg 660
ccctancgcc cgctnctttc gctttcttcc ctttcctttct tngcacgttc gccggctttt 720
cccgtcaagc tctaaatcgg gggctccttt tanggttccg atttantgct ttacngnacn 780

<210> 169
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 169
gggccnctng agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tacgctgagg cctgggagtc tcttgactcc actacttaat 120
tccgtttagt gagaaacctt tcaatttttct tttattagaa gggccagctt actgttggtg 180
gcaaaattgc caacataagt taatagaaag ttggccaatt tcaccccatt ttctgtggtt 240
tgggctccac attgcaatgt tcaatgccgc gtgctgctga caccgaccgg agtacctcgg 300
ccgcgaccac gctaagggcg aattccagca cactggcggc cgttactagt ggatccgagc 360
tcggtaccaa gcttggcgta atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg 420
ctcacaattc cacacaacat acgagccgga agcataaagt gtaaagcctg gggtgcctaa 480
tgagtgagct aactcacatt aattgcgttg cgctcactgc ccgctttcca gtcgggaaac 540
ctgtcgtgcc agctgcatta atgaatcggc caacgcgcgg ggagaggcgg tttgcgtatt 600
gggcgctctt ccgcttnctc gctcactgac tcgctgcgct cggtcgttcn gctgcggcga 660
gcggtatcaa gctactcaaa ggcngtaata ccgntatcca cagaatcagg ggataacgca 720
ggaaagaaca ttgtgagcaa aaggcancaa aagggcagga accgtaaaaa n 771

<210> 170
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)
<223> n = A,T,C or G

<400> 170
acacttgacc tgatacgcca acttggtacc gagctcggac cactagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac acagaatagc tgagcagttc 120
acttcaggga tcaggtcatc tctgctcctc ctagtttcac catgttctgg caataaaaaa 180
cacatattat atcctggttt tctctatcct tgcattacta aggtgactgt ctctctttat 240
acatccttgt atggttctcc cagtattagc aagattgtat atctgtaaag aatgtccagt 300
tttgtaaata tttccctgcc tttttttttc tttttttaca tctgatttta atgcttcgtt 360
aacttcaaaa ggaactggta gagttcagaa ggtgagctgt tgtttttcta aacctcttcc 420
caggaagggg acattgacac ttgaattttt gtcacctttt tcctcattag aaggaaagta 480
gaaagcctta ctgtaggatt tttaaaaaaa aatccatctc accccatatt ggtcttaaat 540
aagtatagac taattaacct aagctacctt taacaacgta gaatttagat gggttcatat 600
atgtgagaaa aacctgaata taggacaggg gtcctacttt tttccccacc tctgtcgccc 660
aggctagagt atagtggtgt gatcttggcc cactgnaacc tctgcttcct anggtcaagt 720
gattcttcct gcctcacctt ccaagtagct gggattggaa gaatatgccn cccccg 777

<210> 171
<211> 782
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(782)
<223> n = A,T,C or G

<400> 171
nngggcccnt agagcatgct cgacggccgc cagtgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtactttt tttttttttt tttttttttt tttaattaat 120
tagaaagtag gctgggcacg gtggctcatg cctataatcc cagcacttgg ggaggccgag 180
gatctcctct ctggtggatc acttgagggc aggagttaag agaccatcct ggccaacatg 240
atgaaaccct gtctctacta aaaatacaaa aagtagctgg gcgtggtggc atactcttac 300
aatcccagct acttgggagg ctgaggcagg agaatcactt gaacctagga agcagaggtt 360
gcagtgggcc aagatcacac cactatactc tagcctgggc gacagaggtg gggaaaaaag 420
taggacccct gtcctatatt caggtttttc tcacatatat gaacccatct aaattctacg 480
ttgttaaagg tagcttaggt taattagtct atacttattt aagaccaata tggggtgaga 540
tggatttttt tttaaaaatc ctacagtaag gctttctact ttccttctaa tgaggaaaaa 600
ggtgacaaaa attcaagtgt caatgtcccc ttcctgggaa gaggtttaga aaaacaacag 660
ctcaccttct gaactctacc agttcctttt tgaaagttaa ccgaagcatt aaaatcagat 720
gttaaaaaag aaaaaaaaaa ggcngggaaa atatttacaa aactgggaca ttctttacag 780
an 782

<210> 172
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 172
canttgacct gatacgccaa cttggtaccg actcggacca ctagtaacgg ccgccagtgt 60
gctggaattc gccctttcga gcggccgccc gggcaggtac catcctgtgg ctccttaagg 120
aggcttctct ctttaattct ccatgaggca tccagggtgg tctgggctat gggaagaacc 180
cttcaacttg ggagtagaca ggtgctccaa ttcatagtgc ccattctcag aggccttgtg 240
tgtgagtttc tccttcatgc cttccttctg gctcttcttg tgctccataa tctgctggag 300
ctggtgccca gcatagtctg gcttggtggt cagcgggcca gccggcacag ctacaccaag 360
gacatctgac accatgtagg ggcgcagcca gcccaccaag ggagtgcttc cggggctgta 420
gtgggtctgt ttgtggtaga agagaagtcc atctacctca aaagggaaat ccatagatag 480
cacatcacac aggctttcgg gagtgcaagg gaagttcttt agccccacaa atttaaaagg 540
attaagcttg gttttctctc ccagtccttc ttcttctggt aactttgaat gcatccagta 600
gaatcggaaa tcaagtctgg caatcataaa aagggtgtcc ccgccagcac atcacattca 660
gaacgtagta ggtctggttt acctcattgt aaatgcaatc tagaatggtg taagcttttg 720
ctgntgaagt ttccctgtgc ctctggcaga atgaagaaan ctgttgacac aac 773

<210> 173
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 173
ntgggcctct nnagctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
agcgtggtcg cggccgaggt acagttcctt ggagcagagt gagcgccgcc ggaggttact 120
ggaactgcag aaatccaagc ggctggatta tgtgaaccat gccagaagac tggctgaaga 180
tgactggaca gggatggaga gtgaggaaga aaaataagaa agatgatgaa gaaatggaca 240
ttgacactgt caagaagtta ccaaaacact atgctaatca attgatgctt tctgagtggt 300
taattgacgt tccttcagat ttggggcagg aatggattgt ggtcgtgtgc cctgttggaa 360

```
aaagagccct tatcgtggcc tccaggggtt ctaccagtgc ctacaccaag agtggctact     420
gtgtcaacag gtttcttca cttctgccag gaggcaacag gcgaaactca acagcaaaag     480
actacaccat tctagattgc atttacaatg aggtaaacca gacctactac gttctggatg     540
tgatgtgctg gcggggacac cctttttatg attgccagac tgatttccga ttctactgga     600
tgcattcaaa gttaccagaa gaagaaggac tgggagagaa aaccaagctt aatcctttta     660
aatttgtggg gctaaagaac ttcccttgca ctcccgaaag cctgtgtgat gtgctatcta     720
tggatttcct tttgaggtag atggacttct cttctaccac aaacagaccc ac             772
```

<210> 174
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 174

```
acactatgac ctgatacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacaaaaata catttttcca     120
catacaaaag agagaaaaaa acaaagacat gtggcgggtg gcgaggggag gcccaatccc     180
aacaccctac aaggttccat ggaatggaga aggaacaaaa aaatccccaa ttattttggg     240
gtaagatgtg ccccagaaaa ggtgaaatct atgcaataaa acccaggttt tcttcaaatc     300
tagcatctag gatttctatc agagtttcaa ataatcagaa tttctatcag aatttctacc     360
ctgaggtgac acctactaac tgtaggttct ttcattaaaa atgaagacat ctttcaccag     420
aatgtatcaa gctataaaac tggcttcaga gcctacactt agccagagtg gaaaaaaaat     480
agtgcatatt ttcgacagca attttgaatt gatgcttgag gtctcaatcc accagcaccc     540
agatatcatg ttacctccct cagttgaata caagttaaaa tgatgatctt atcgagatct     600
caatagagca cagtgccctt catgtttcgg gtaagaaggt gggaggagga atgaagccgg     660
gtattacacc cagcccaatg acagcttaag ccttaacatg cnggcatctt acaatgacca     720
taaacaaggg angggccaag canggctngc gatcattact ttgcgcacag aatgccatgt     780
```

<210> 175
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 175

```
gggcctctag agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt      60
tcgagcggcc gccgggcagg tactaaaaca gctttgctta tgttggccag gggaaaacat     120
ggcattctgt gcgcaaagct aatgatcgcc agccctgcct tggcccctcc cttgtttatg     180
gtcattgtaa gatgcccgca tgttaaggct taagctgtca ctgggctggg tgtaataccc     240
gcttcattcc tcctcccacc ctcttacccg aaacatgaag ggcactgtgc tctattgaga     300
tctcgataag atcatcattt taacttgtat tcaactgagg gaggtaacat gatatctggg     360
tgctggtgga ttgagacctc aagcatcaat tcaaaattgc tgtcgaaaat atgcactatt     420
tttttccac tctggctaag tgtaggctct gaagccagtt ttatagcttg atacattctg     480
gtgaaagatg tcttcatttt taatgaaaga acctacagtt agtaggtgtc acctcagggt     540
agaaattctg atagaaattc tgattatttg aaactctgat agaaatccta gatgctagat     600
ttgaagaaaa cctgggtttt attgcataga tttcaccttt tctggggcac atcttacccc     660
aaaataattg gggatttttt tgntccttct ccattccatg gaaccttgta gggtgtttgg     720
gattgggcct tccctngcca cccgccacat gtctttggtt ttttctctct t              771
```

<210> 176
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 176
```
atngggcctc tagagcatgc tcgagcggcc gccatgtgat ggatatctgc agaattcgcc      60
cttagcgtgg tcgcggccga ggtactcatg tatttttttt tttttccaga tctctttccc     120
caagttgcta ttgtaagagt attctgctgc gtgtggatgc agttatacac attaaagcag     180
atctggagtc tgaagtagct ataaagcagc tataaaacag aaatacatgc atagctgcag     240
aaaccatgat aggtagagga cttttctttt ggttttgttt tgttttgttt tgttttgttt     300
ttggttttac agagaagaga tttttattac aaagaaaaaa attccagtga attgtgcaga     360
aatgctggtt tttacaccat cctaaagaaa aactttacaa gggtgttttg gagtagaaaa     420
aaggttataa agttggaatc ttaaattgta aaattaacca ttgagtgtca aagttctaaa     480
agcagaactc attttgtgca atgaacataa ggaaagacta ctgtataggt tttttttttc     540
tccttttaaa tgaagaaaag ctttgcttaa gggttgcata cttttattgg agtaaatctg     600
aatgatccta ctcctttgga gtaaaactag tgcttaccag tttccaattg tatttagctt     660
ctggttggaa tttgaaaaaa aaagaaaaaa agaaaaagaa aacctaaata aaataggtga     720
aagttccctg actattcagg tgaatacnca aaaanaaaan nnnnnnaann nnt            773
```

<210> 177
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 177
```
acattngacc tgatacgcca gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta cagtaggaaa ataagaataa     120
caacgggcaa aatcttttta gaacatttat gctttatctg ttttagcttc taaaacaatc     180
ctgaaggatg aataattatc atgagtatag cagaatttaa ttttccctgt tgctccaaaa     240
ttttaatgaa aactttacgg ttgagagaaa taggtaaata aaaaaacttc ctaaaattct     300
aaagacaatt gttgaataaa atttaagtga atgagtttgt gcttcatatt taacttttaa     360
ctttccaata ggctttatta aatggaaaac tgaaatttac aaagtcttag agtagaagca     420
tttttatcct ggctagggat tctctaagag aaccagtagc accaagatgc actggaacag     480
tgcaacgaga gagttcatgc cttanggttt agaagcatac aagcaaaggg aatggtgccc     540
acttcttact agaaaaattt cacaggctgg agtctgggcg gaggagcctg ggatgacagt     600
agaagtgtgc aggaagcact aagtctagcc tgtacctgcc cgggcggncg ctcgaagggc     660
gaattctgca gatatccatc acactggcgg ccgctcgagc atgctctana gggcccaatt     720
cgccctatag tgagtcggat tacanttnaa tggccgncgt tttacaacgt cc             772
```

<210> 178
<211> 770
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(770)
<223> n = A,T,C or G

<400> 178
```
attgggcccc tnnagcatgc tcgngcggcc gccagtgtga tggatatctg cagaattcgc      60
ccttcgagcg gccgcccggg caggtacagg ctagacttag tgcttcctgc acacttctac     120
tgtcatccca ggctcctccg cccagactcc agcctgtgaa atttttctag taagaagtgg     180
gcaccattcc ctttgcttgt atgcttctaa accctaaggc atgaactctc tcgttgcact     240
gttccagtgc atcttggtgc tactggttct cttagagaat ccctagccag gataaaaatg     300
```

```
cttctactct aagactttgt aaatttcagt tttccattta ataaagccta ttggaaagtt     360
aaaagttaaa tatgaagcac aaactcattc acttaaattt tattcaacaa ttgtctttag     420
aattttagga agttttttta tttacctatt tctctcaacc gtaaagtttt cattaaaatt     480
ttggagcaac agggaaaatt aaattctgct atactcatga taattattca tccttcanga     540
ttgttttaga agctaaaaca gataaagcat aaatgttcta aaaagatttt gcccgttggt     600
attcttattt tcctactgta cctcggccgn gaccacgcta agggcgaatt ccagcacact     660
ggcggccgnt actagtggat ccgagctcgg tacccaanct tggcgtaatc atggncatag     720
ctgttcctgn gngaaatngn natncgntna caattnccac acatacnann                770
```

<210> 179
<211> 502
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 179

```
cnnnttgacn tgattcgcca acttggtacc gagctcggat ccctagtaac ggccgccagt      60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac ctggccccca acttctcgaa     120
taaaatgaaa ctatgattct tggcctcact cactaccatg tgacattgat caaatcactt     180
cacctctcca aacctcagag tctttatctg taagatggaa aaagtaacac ctacttcagg     240
ggctgtcatg aggattaaat aaatgtgccc agcaggtagt aagtatacaa cacaaagcat     300
ctaatggttc attcatacat ttgcttattt tgcaattatt ggccacctgc caatgttggg     360
cactgttcta ggcacagggg atacagcaag ggcaaacacc taactactgg tggagggaag     420
acgataaaca aatacgtaaa gatttgtgcc aggtagtgat aaaagcaaag aatgactcat     480
ggagagggtc agctggggag ac                                              502
```

<210> 180
<211> 823
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(823)
<223> n = A,T,C or G

<400> 180

```
gggccttnna gcatgctcga cggccgccat gtgatggata tctgcagaat tcgccctttc      60
gagcggccgc ccgggcaggt actgcgtggt ctccccagct gaccctctcc atgagtcatt     120
ctttgctttt atcactacct ggcacaaatc tttacgtatt tgtttatcgt cttccctcca     180
ccagtagtta ggtgtttgcc cttgctgtat cccctgtgcc tagaacagtg cccaacattg     240
gcaggtggcc aataattgca aaataagcaa atgtatgaat gaaccattag atgctttgtg     300
ttgtatactt actacctgct gggcacattt atttaatcct catgacagcc cctgaagtag     360
gtgttacttt ttccatctta cagataaaga ctctgaggtt tggagaggtg aagtgatttg     420
atcaatgtca catggtagtg agtgaggcca agaatcatag tttcatttta ttcgagaagt     480
tgggggccag gtacctcggc cgcgaccacg ctaagggcga attccagcac actggcggcc     540
gttactagtg gatccgagct cggtaccaag cttggcgtaa tcatggtcat agctgtttcc     600
tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa gcataaagtg     660
taaagcctgg ggtgcctaat gagtgagcta actcacatta attgcgttgc gctcactgcc     720
cgcttttcag tcgggaaacc tgtcgtgcca gctgcattaa tgaatcggcc aacgcgccgg     780
gaaaagcngn ttgcgtattg ggcgctcttn ncgctttctt gcn                       823
```

<210> 181
<211> 501
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 181
cantatgacn tgattcgcca acttggtacc ngctcggatc cctagtaacg gncgccattg 60
tnctggaatn cgnccttagc gtggtcgcgg ccgaggtact ttcttcnttt nctnnaattt 120
tccataacct agtgccngnt tgatnccctc acatggntgg ttcacatncn cngtacagan 180
gcncggncac catgggan ag ggcagcactc ntnccttctn angggatctt ggcctaangg 240
tgtacnaagg gagangatgg antntcttct gncctcncta nggcctaggg aacccagnag 300
canatcccac nacnccttcn atntttnagc caaggagaag ccccttggtg acnttnagtt 360
ccaaccatta tacncagtgn gagaatggat nntcctggtc ccaaccatta cagggtgaag 420
atatnaacag ttaaggaaga tacagtttng atgaggcctc anganggagc agntnacacc 480
atcatannca tatgcaggga a 501

<210> 182
<211> 830
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(830)
<223> n = A,T,C or G

<400> 182
ggcccttnga ngcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tacacgagaa gctccgagga tggctgaagt ccaacgtctc 120
tgatgcggtg gctcagagca cccgtatcat ttatggaggc tctgtgactg gggcaacctg 180
caaggagctg gccagccagc ctgatgtgga tggcttcctt gtgggtggtg cttccctcaa 240
gcccgaattc gtggacatca tcaatgccaa acaatgagcc ccatccatct tccctaccct 300
tcctgccaag ccagggacta agcagcccag aagcccagta actgcccttt ccctgcatat 360
gcttctgatg gtgtcatctg ctccttcctg tggcctcatc caaactgtat cttcctttac 420
tgtttatatc ttcaccctgt aatggttggg accaggccaa tcccttctcc acttactata 480
atggttggaa ctaaacgtca ccaaggtggc ttctccttgg ctgagagatg gaaggcgtgg 540
tgggatttgc tcctgggttc cctaggccct agtgagggca gaagagaaac catcctctcc 600
cttcttacac cgtgaggcca agatcccctc agaangcang agtgcttgcc cttcccatgg 660
tgcccgtgcc tcttgtgctg ngtatgtgaa ccacccatg tgagggaata aacctggcac 720
tangtctttg aaaaaaanaa aaacntnaaa aaaantccct tcggccgnga ccacgctaag 780
gnccaattcc ancacaatgg gcgnncgtna ctantggatc caaccttnct 830

<210> 183
<211> 484
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = A,T,C or G

<400> 183
ttgacatgat acccaacttg taccgagctc ggatccacta gtaacggccg ccagtgtgct 60
ggaattcgcc ctttcnagcg gccgcccggg caggtacccc agcccgcccc actgagtttg 120
ccttctatcc gggatatccg ggaacctacc agcctatggc cagttacctg gacgtgtctg 180
tggtgcagac tctgggtgct cctggagaac cgcgacatga ctccctgttg cctgtgggca 240
gttaccagtc ttgggctctc gctggtggct ggaacagcca gatgtgttgc cagggagaac 300
agaacccacc angtcccttt ttggaaggca gcatttgcag acttcaacgg gcaaaacctc 360
tgacgcctgc gcctttcgtc gcggncgcag aaaccatttc gnactttaan attgaatctt 420
ctctaaggtt ganaatttct ggatcccttg anaactttta canntgnnct ttantccntt 480
taaa 484

<210> 184
<211> 824
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(824)
<223> n = A,T,C or G

<400> 184
ggccttagag ctgctcgacg gccgccatgt gatggatatc tgcagaattc gcccttagcg 60
tggtcgcggc cgaggtacca gattggccac tctagggtag aacaccaggt agattcctaa 120
ggttcctgac tccaggccct ggctcccagt tggcatctct ggacctactt ggggtcacag 180
tgaactcact gccctgaagg gaagatgcct ggctggatat gccacctgct gattggagag 240
tccttggacc ttgagtgaac acaggtggta gccaggcagt gatcatcata ggccttgggt 300
gagccccagt gctgtgttgg cttcaggtct gacacagagc tgtcccagtg gtagtcgcca 360
caggggtgct tgtgtcatca tcccttctcc agctccaggc agctcagcac agagacatag 420
tgtccatttg tttgagtgaa agtaaaagaa gagaacaaga gtctccacct agtaatccag 480
ggaattctcc cagatcttac ccaagacaac caaggcaaga gacacagcat tactgggctg 540
gaggtgcccc ctaatgcagg tatggctgca gtgaacaaag acttagatca caacacccaa 600
atcccttcta atagttggaa agccttncca agaaggatgc cggacaaaca agcccaaact 660
gtgaagacta caacaaatac ctaactcttt caatgcccag acactgaaga atatcccaaa 720
ctttaagacc atccatgaaa acatgacctt accaacaagc taaataagac accagtgacc 780
aatcccagag agatagagat atgtgtcctt tcnnacagag aatt 824

<210> 185
<211> 499
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(499)
<223> n = A,T,C or G

<400> 185
cacttgacnt gatacgccaa cttgtaccga ctcggatcca ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttctttttt nttntatttt 120
tttttttcgt ctccccaaag ctttatctgt cttgactttt taaaaaagtt tgggggcaga 180
ttctgaattg gctaaaagac atgcattttt aaaactagca actcttattt ctttccttta 240
aaaatacata gcattaaatc ccaaatccta tttaaagccc tgacagcttg agaaggtcac 300
tactgcattt ataggacctt ctggtggttc tgctgttacg tttgaagtct gacaatcctt 360
gagaatcttt gcatgcagag gaggtaagag gtattggatt ttcacagagg aagaacacag 420
ccgcanaatg aagggccagg cttactgagc tgccaatgga gggctcatgg gtgggacatg 480
gnaaagaagg cacctagcc 499

<210> 186
<211> 504
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(504)
<223> n = A,T,C or G

<400> 186
cacttgacnt gatacgccaa cttggtaccg agctcggatc cctagtaacg gccgccagtg 60
tgctggaatt cgcccttagc gtggtcgcgg ccgaggtacc tcaggaggtc tgcaagtgtg 120
tggttaggta aaaactganc tgtgcaaact cactgtatcc aagctcttct catgagagag 180
cggaacaacc tggcaagctt aaaggcaagt gttttcgttc ttttaattaa ataggctgtg 240

acaaaattaa caataaaact agcccagaac caaccagccc ggtaagtgtc gtgcaaatct 300
tgcagtaaca aaagaccatc tgagagacta cacgttggtc tccagtccta gcaagcgtcc 360
cattctctnc acattcttat caattgtagc ttgacatgtt atctccttgg cacattccat 420
aggaaaccag cctctttctn catctcgtag tcgntccccc ttataccagc catcgctgac 480
acgtttgata gatgaagacg acgt 504

<210> 187
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 187
gggcctctna gctgctcgnc ggccgccatg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta cgcggggact gggtttttct ccttttgtag ccttttcctt 120
tagtctcctc ttcccggtgg ttggtaaaaa gaggtgaatt gacagcctat gttgaagaca 180
ctgtgctttt ctcaagaagg acatccaaac agcaagtcta cttctttctc tttaacgatg 240
tgctcattat caccaagaag aagagtgaag aaagttacaa cgtcaatgat tattccttaa 300
gagatcagct attggtggaa tcttgtgaca atgaagagct taattcttct ccagggaaga 360
acagctccac aatgctctat tcaagacaga gctctgccag tcacctcttt actctgacag 420
tccttagtaa ccacgcgaat gagaaagtgg agatgctact aggagctgag acgcagagcg 480
agcgagcccg ctggataact gccctgggac acagcagcgg gaagccgcct gcagaccgaa 540
cctcactgac ccaggtggaa atcgttaggt catttactgc taagcagcca gatgaactct 600
ccctgcaggt ggctgacgtc gtcctcatct atcaacgtgt cagcgatggc tggtatgagg 660
gggaacgact acgagatgga gaaagaagct ggtttcctat ggaatgtgcc aaggagataa 720
catgtcaagc tacaattgat aagaatgtgg agagaatggg accttgctag gactggagac 780
caacgtgtag tctctcaaan gncttttggt actgcaagat tg 822

<210> 188
<211> 504
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(504)
<223> n = A,T,C or G

<400> 188
tatgancatg atacgccaac ttggtaccga gctcggatcc actagtaacg gcccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac caaaaaagta aacattgata 120
atatggcctg acaacaatca gatatgctaa gctctagaag caaaagcaag gtaggattgc 180
ctccaaatgt tgacaggtat tagccatacc acagtaacta gatctaatgt gagggctaaa 240
tgcctggaga ggcagaaccc taaaggatgc ttagttatag ctccatgctg ccgccgagtg 300
gcttgatgct ccattacacc ctccttggat ccaaccttcc attaaggctg aaggctctag 360
agggcagagt attcaagatg ttagatctgg tccaagccca aattctagag ttaaaagcag 420
aggggttctt agtggctgaa aaaaaacaaa acctgatgac atttgggact ccagttttga 480
ggaaaggctc tgatgatgag gctt 504

<210> 189
<211> 842
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(842)
<223> n = A,T,C or G

<400> 189
nnnnnnnntt tttgaaccgg ccctntnang catgctcgac ggccgccatg tgatggatat 60
ctgcagaatt cgcccttteg agcggccgcc cgggcaggta cccttctcgc ttttgccatt 120
agccaaggat agaagctgca gtggtattaa ttttgatata atctttcaaa ccagcttcat 180
gtggcttccc ttttctttgt tcaagatgag ggccaggagg ggaaacatca cacctgccct 240
aaaccctgtt cctggaggtc agcatttgat ctgttgcaag cccctctttc tgtcccctct 300
tcctaccctg cctcccatga ctttgctcct cacacttttg gaaccatgcc ttccgggggg 360
gcccatctct tctggccgtc cttgtctctg ggccacttgg agtgtgtgat aaatcagtca 420
agctgttgaa gtctcaggag tctctggtag cctgcagaag taagcctcat catcagagcc 480
tttcctcaaa actggagtcc caaatgtcat caggttttgt ttttttttcag ccactaagaa 540
cccctctgct tttaactcta gaatttgggc ttggaccaga tctaacatct tgaatactct 600
gccctctaga gccttcagcc ttaatggaag gttggatcca aggagggtgt aatggagcat 660
caagccactc ggcggcagca tggagctata actaagcatc ctttagggtt ctgcctctcc 720
aggcatttag cccctacatt agatctagtt actgtggtat ggctaatacc tgtcaacatt 780
tggaggcaat cctaccttgc ttttgcttct agagcttagc atatctgatg gttgcaggcc 840
cg 842

<210> 190
<211> 503
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(503)
<223> n = A,T,C or G

<400> 190
actatgacct gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag 60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg taccatgctg acttcttggt 120
atcttttaag gcctaatttt cccttccttg agattactgt agtgtgttcc agctaatttc 180
tatttggaaa cgagttggaa cagctgaaaa ctaggtatta ttgaaggcaa agcagcctca 240
cgtcagtttt ttatcagctc atttgggaag tttttttttt tttttttaa ttaattagaa 300
agtaggctgg acacggtggc tcatgcctat aatcccagca cttggggagg ccgaggatct 360
cctctctggt ggatcacttg agggcaggag ttaagagacc atcctggcca acatgatgaa 420
accctgtctc tactaaaaat acaaaaagta nctgggcgtg gtggcatact cttacaatcc 480
cagctacttg ggaggctgag gca 503

<210> 191
<211> 829
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(829)
<223> n = A,T,C or G

<400> 191
gggcctctga gcatgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac tttttttttt tcttttttta catctgattt taatgcttcg 120
ttaacttcaa aggaactgg tagagttcag aaggtgagct gttgtttttc taaacctctt 180
cccaggaagg ggacattgac acttgaattt ttgtcacctt tttcctcatt agaaggaaag 240
tagaaagcct tactgtagga tttttaaaaa aaaatccatc tcaccccata ttggtcttaa 300
ataagtatag actaattaac ctaagctacc tttaacaacg tagaatttag atgggttcat 360
atatgtgaga aaaacctgaa tataggacag ggtcctactt tttttcccca cctctgtcgc 420
ccaggctaga gtatagtggt gtgatcttgg cccactgcaa cctctgcttc ctaggttcaa 480
gtgattctcc tgcctcagcc tcccaagtag ctgggattgt aagagtatgc caccacgccc 540
agctactttt tgtattttta gtagagacag ggtttcatca tgttggccag gatggtctct 600
taactcctgc cctcaagtga tccaccagag aggagatcct cggcctnccc aagtgctggg 660
attataggca tgagccaccg tgtccagcct actttctaat taattaaaaa aaaaaaaaaa 720

```
aaactttcca aatgagctga taaaaaactg acgtgaggct gctttgcctt caataatacc      780
tagttttcag ctgtccaact cgtttccaaa tagaaattaa gctgggang                  829

      <210> 192
      <211> 503
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(503)
      <223> n = A,T,C or G

      <400> 192
ntatgaccat gattacgcca agcttggtac ccgagctcgg atccactagt aacggccgcc       60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtactgcct ttgggcttct      120
tctctctcct gttttctcct ctcgaattct ttactgtttt aatacattgt tcttctggct      180
gaggctggtc aaagctacac tgatcttcaa ataaaggctc gtcaatgcta cactgttctt      240
caagcaacgg ctggtgaact tgttctgaca aaggatggtc gacttttctt gcttgcttcc      300
tatgtctttc ctcttcagct aaatagagat gtttcagatt atctgggtat cgatctgtga      360
attgagattc cagtgacgtt tgagccttct tttccttccg tagcaatttc ttgtaacttt      420
gctgtatttt cagttttctt cgaaaagcaa agccttgtcc ctcgcgaacg ctccccacga      480
agcttgcggg tggttaggcc gca                                              503

      <210> 193
      <211> 834
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(834)
      <223> n = A,T,C or G

      <400> 193
ancggctctc tagagctgct cgacggccgc catgtgatgg atatctgcag aattcgccct       60
tagcgtggtc gcggcncgag gtacaattca ttatgtgttt cattaattac ctttattaaa      120
aacaacacaa ttatattaca atagggacaa aaaatgttta agcaaatgaa aacgaaacca      180
tgacataccc aaactcagga ggaggcaaca aaggcagtgc taaagggaag cttacagctc      240
cagatgctta aattaaaaag aagaaagatc tcaaacccat gctaaaggga agcttacagc      300
tacagatcct taaattaaaa agaagaaaga tctcaaaccc atgctaaagg gaagcttaca      360
gctgcagatg cttaaattaa aagaagaaa gatctgaaac ccttgctaaa gggaagctta      420
tagctgcagg tgcttaaatt aaaaagaaga aagatctcaa atcaataacc taacattaca      480
cctgaagggg gggaaaaaaa ctaatgacaa accaagcaaa aggaagaaaa taacagatta      540
gagcagagat aagcagaata agaccagaaa aaaggaaaaa aacactgagt ttgttttttt      600
aaagatcaat aaaaatttta aaactcacag ctatattaag aaaaaagaga aatctcaaat      660
actaaaatca taagtaaaag angtgacagt acaggaataa gaatgtgaga cagaagacat      720
ggcggcctac cacccgcaag ccttcgtggg gagcgttcgc ganggacaag gctttgcttt      780
tcgaagaaaa ctgaaaatnc cgcaaagttc cagaaattgt tcngaagaaa agaa            834

      <210> 194
      <211> 502
      <212> DNA
      <213> Homo Sapien

      <400> 194
cacttgacct gattcgccaa gcttggtacc gagctcggat ccctagtaac ggccgccagt       60
gtgctggaat tcgccctttc gagcggccgc ccgggcagga cgctgaggcc tgggagtctc      120
ttgactccac tacttaattc cgtttagtga gaaacctttc aattttcttt tattagaagg      180
gccagcttac tgttggtggc aaaattgcca acataagtta atagaaagtt ggccaatttc      240
accccatttt ctgtggtttg ggctccacat tgcaatgttc aatgccacgt gctgctgaca      300
ccgaccggag tacctcggcc gcgaccacgc taagggcgaa ttctgcagat atccatcaca      360
```

ctggcggccg ctcgagcatg catctagagg gcccaattcg ccctatagtg agtcgtatta 420
caattcactg gccgtcgttt tacaacgtcg tgactgggaa aaccctggcg ttacccaact 480
taatcgcctt gcagcacatc cc 502

<210> 195
<211> 848
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(848)
<223> n = A,T,C or G

<400> 195
gnnnnnnntt tnnaatgggc ctctnnagca tgctcgagcg gccgccatgt gatggatatc 60
tgcagaattc gcccttagcg tggtcgcggc cgaggtactc cggtcggtgt cagcagcacg 120
tggcattgaa cattgcaatg tggagcccaa accacagaaa atggggtgaa attggccaac 180
tttctattaa cttatgttgg caattttgcc accaacagta agctggccct tctaataaaa 240
gaaaattgaa aggtttctca ctaaacggaa ttaagtagtg gagtcaagag actcccaggc 300
ctcagcgtcc tgcccgggcg gccgctcgaa agggcgaatt ccagcacact ggcggccgtt 360
actagtggat ccgagctcgg taccaagctt ggcgtaatca tggtcatagc tgtttcctgt 420
gtgaaattgt tatccgctca caattccaca caacatacga gccggaagca taaagtgtaa 480
agcctggggt gcctaatgag tgagctaact cacattaatt gcgttgcgct cactgcccgc 540
tttccagtcg ggaaacctgt cgtgccagct gcattaatga atcggccaac gcgcggggag 600
aggcggtttg cgtattgggc gctcttccgc ttcctcgctc actgactcgc tgcgctcggt 660
cgttcggctg cggcgagcgg tatcagctca ctcaaaggcg gtaataccgg tattcacaga 720
attcagggga taacgcagga aagaacatgt gagcaaaagg ncagccaaag gccaggaacc 780
cgtnaaaagg ccgcgttgct ggcgttnttc cataggctcc gccccccttga cgagcatnac 840
aaaaatct 848

<210> 196
<211> 511
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

<400> 196
canntatgac ctgattacgc caagcttggt accgagctcg gatccactag taacggccgc 60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactttttt tttttttttt 120
tttttttttt ttttagggtt ataaaagccc ttttataaag ccatttttaa acaaaacaaa 180
aaaaaagttt acaaaagaaa aaaagatnca gaaaaagaat aacttgcttc atatgtccca 240
aaaagagaaa aaaataaagg ggacaatgcc aacatgctca acaataaagg cttctttttc 300
ttattttttt aatacaaaat ncaagcaaag gatacacata cttaaaacag agctcaggag 360
canacacgca ntcctggaaa cccttcaata aaancaaagc aggagtttgn tttttctttg 420
tctatgcana tacatacaga gactgggata tgtaaaaatt aagtatnaca aaagaccatt 480
acacgattct accaatgcat gttgcatctn g 511

<210> 197
<211> 816
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

<400> 197
gggcctctag agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tactaaggaa gttaaagttt gaatgtaacc actttattta 120
aaaggttttt ttctttaatt taaatgaaat ggggttgaag tgaacatgat tttgttgacc 180
atgttcgtga attacagatg caacatgcat tggtagaatc gtgtgatggt cttttgtgat 240
acttaatttt tacatatccc agtctctgta tgtatctgca tagacaaaga aaaaacaaac 300
tcctgctttg cttttattga agggtttcca ggactgcgtg tctgctcctg agctctgttt 360
taagtatgtg tatcctttgc ttgtattttg tattaaaaaa ataagaaaaa gaagccttta 420
ttgttgagca tgttggcatt gtccccttta ttttttctc tttttgggac atatgaagca 480
agttattctt tttctgtatc ttttttttctt ttgtaaactt ttttttgtt ttgtttaaaa 540
atggctttat aaaagggctt ttataaccct aaaaaaaaaa aannnnnnna aaaaaaaaaa 600
gtcctcggcc gcgaccacgc taagggcgaa ttccagcaca ctggcggncg ttactagtgg 660
atccgagctc ggaccaagct tggcgtaatc atggncatag ctgttcctgt gtgaaatgtt 720
atccgctcac aattcccaca catacaaccc ggagcataaa gtgtaaacct ggggtgccta 780
atgagtgagc tactcaataa ttgcgttgcg ctcang 816

<210> 198
<211> 498
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

<400> 198
tgattcgcca agcttggtac cgagctcgga tccactagta acggcccgcc agtgtgctgg 60
aattcgccct tcgagcggnc gnccgggcag gtacaattca gagcaggtgt ccatagaaac 120
aactaggntt gaaaaaactg taagacaatt cacagttgaa atcaaaccaa cactgtgaat 180
gtgttaaata cttgccatat aacaacactt taacattgat cttgctaaat aaggctatga 240
ttcataagat gcatggattt ccaaagctgn ttaacattct tataaattaa ttcacaggat 300
tcaaatagtt gctttttagc ttcaactggg tattagcaaa aatnatacaa aatgatcccc 360
gtgcaagcac aaatttacct tccttctaaa taaaacatga cagattatat tacaacttga 420
tagcctctct tttaaaaagt ctgtgacatt attaaagagg tgacggaatg cttgntttgc 480
aaaccccaac acatcttt 498

<210> 199
<211> 837
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(837)
<223> n = A,T,C or G

<400> 199
nnnnnnntnn cantgggcct ctagagctgc tcgacggccg ccatgtgatg gatatctgca 60
gaattcgccc ttagcctggt cgcggccgag gtaccttgag atctgagcaa ctgtgttaat 120
gaagtaatag caatggtcca cagtgaaaga tgtgttgggg tttgcaaaac aagcattccg 180
tcacctcttt aataatgtca cagacttttt aaaagagagg ctatcaagtt gtaatataat 240
ctgtcatgtt ttatttagga aggaaggtaa atttgtgctt gcacggggat cattttgtat 300
tatttttgct aatacccagt tgaagctaaa aagcaactat ttgaatcctg tgaattaatt 360
tataagaatg ttaaacagct ttggaaatac atgcatctta tgaatcatag ccttatttag 420
caagatcaat gttaaagtgt tgttatatgg caagtattta acacattcac agtgtttgtt 480
tgatttcaac tgtgaattgt cttacagttt tttcaaacct agttgtttct atggacacct 540
gctctgaatt gtacctgccc gggcggccgc tcgaagggcg aattccagca cactggcggc 600
cgttactagt ggatccgagc tcggtaccaa gcttggcgta atcatggtca tagctgnttc 660
ctgtgtgaaa ttggtatccc gctcacaatt ccacacaaca tacgagccgg aagcataaag 720
tgtaaagcct ggggtgccta atgagtgagc taactccatt aattgcgttg cgctcactgg 780
cccgctttnc agtcnggaaa cctgtctgcc anctgcatta atgaatcggc caccccg 837

<210> 200
<211> 506
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 200
nnnnttgacc tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tactgcatcc ataatttatc 120
gccatgtgca acagctttgc gttttctaag gcacaatttt taatgaaatg atgtgtagat 180
ttcaatctaa taacagctca tccaaatgac aaatatggtc gaaatccctc cagtggctga 240
ggaaatttct gcacctatat ggaacccaca tgcaaagaac ccatctagca tgtaataaat 300
aatcgctagc catactcaat aagacacgga aaaattattg cttacataac agaaaaacat 360
ctacttgacc ccttttatg actacatcaa tctattagga gtgtatccat agtctacatt 420
cacaaaatgt catcttgact tatttgccat tgatttaagg cagaataaat agtccccctt 480
tccccagtct taacaacaaa aaacaa 506

<210> 201
<211> 864
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(864)
<223> n = A,T,C or G

<400> 201
ccnntanagc atgctcgacg gccgcccggg caggtacctt ggaagttatg tcattaatat 60
aggctggttc atcaaataaa gcaaaacctt gcaatatcag ctagatttac actccgggac 120
gttgcccaaa ggtaggaaga aagcaggggg aaatatttca gtcatcattt ccaaagtcat 180
tatcaaaatc tgtgaggaag tttaatcttc caaagagtca atgtcagaca tcaggcctct 240
gttgcctgct tctctcgagg cactagatta ggagtcttca ataagagact taacatgagg 300
tatatggaag atgaggcacc gagataagtt catcattagg tgtgagcact gctcaccctt 360
gctggcaagt tctccttaag ggcctgaagc acaggtgtcc aaagaaaagc gttaagtcca 420
tcttaataga atctatgtgg tatatgatgt ggtcagcccc tggtctgtga tcagcaagaa 480
cctacagcac agattatgcc ctgcccactt caatgaatac ctactctcct ncattctcca 540
tcactttttt gctatcaaga ctccggacct tgcccatgga gaagtttaga gaggaactct 600
tgtggagagc tggttaattt tctgccctgt gcgacaagtt tcaacttggc caagaaangg 660
agtcaagtta ttaaaaagca tcacaatgta gaatcttcca ggctgggttt tttggntttt 720
tnggtggttn aanactgggg gnaaaagggg ggacctattt aaattccngg cctttaaaat 780
caaatgggcc aaaattaagt tcaaggaatg gaccattttt nggggnaaat ggttngaacc 840
ttntngggan ttcccncctt ccct 864

<210> 202
<211> 505
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(505)
<223> n = A,T,C or G

<400> 202
gnntnanacn nttnactaat antganttag tnccgactcg atccctctna ctncantnan 60
ancgntngaa ttgcccttnn tagcggccnt ccngncaggt acaaccagtt tggaaaacag 120

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tntcacagtt tttttaaaaa ttacatatac aaccancaac tgacccagcc atttcactcc     180
taggtattta cccaagatna actgaagtgt agatacaagc anagacttgn gcacaagtgt     240
tcatggtaag ctttactngc antagctcca aactanggac aactcaaata gccaacangg     300
aaatggacaa attatgttac tttcatacag tggaatattc tcttgtgata aaaataantg     360
aacanttgat acatggatga atctcaaaat aattatgctg agtaaaagaa gccagacaaa     420
atgtacagtg catacagcta ttcatgtggg tgccagctcc atcccccagt gacctcttca     480
tacggncaga gggtggcatg gcanc                                           505
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<210> 203
<211> 819
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(819)
<223> n = A,T,C or G

<400> 203
ggcctcngca gcatgctcga ncggccgcca tgtgatggat atctgcagaa ttcgccctta      60
gcgtggtcgc ggccgaggta cgcgggagag caggaccgga gcgcgggcca agctggagat     120
ggatgatgct gaccctgagg aaagaaacta tgacaacatg ctgaaaatgc tgtcagatct     180
gaataaggac ttggaaaagc tattagaaga gatggagaaa atctcagtgc aggcgacctg     240
gatggcctat gacatggtgg tgatgcgcac caaccctacg ctggccgatt ccatgcgtcg     300
gctggaggat gccttcgtca actgcaagga ggagatggag aagaactggc aagagctgct     360
gcatgagacc aagcaaaggc tgtaggcccc actggcccac cacagctgcc atgccaccct     420
ctgcccgtat gaagaggtca ctgggggatg gagctggcac ccacatgaat agctgtatgc     480
actgtacatt ttgtctggct tcttttactc agcataatta ttttgagatt catccatgta     540
tcaattgttc acttattttt atcacaagag aatattccac tgtatgaaag taacataatt     600
tgtccatttc cctgttggct atttgagttg tccctagttt ggagctattg cgagtaaagc     660
taccatgaac atttgtgcac aagtctttgc ttgtatctac acttcagttt atcttgggta     720
aatacctang agtgaaatgg cttgggtcaa tntgttggtt ggatatgtaa tttttttaaaa    780
aaaactgnga tactgttttc caaactgggt tgtccctct                            819
```

```
<210> 204
<211> 840
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(840)
<223> n = A,T,C or G

<400> 204
gnnnnntttn nnctnntgga acccgttttg nnaagctgct cgacggccgc catgtgatgg      60
atatctgcag aattcgccct tagcgtggtc gcggccgagg taccttnaga tctgagcaac     120
tgtgttaatg aagtaatagc aatggtccac agtgaaagat gtgttggggt ttgcaaaaca     180
agcattccgt cacctcttta ataatgtcac agactttttt aaaagagagg ctatcaagtt     240
gtaatataat ctgtcatgtt ttatttagga aggaaggtaa atttgtgctt gcacggggat     300
cattttgtat tatttttgct aatacccagt tgaagctaaa aagcaactat ttgaatcctg     360
tgaattaatt tataagaatg ttaaacagct ttggaaatac atgcatctta tgaatcatag     420
ccttatttag caagatcaat gttaaagtgt tgttatatgg caagtattta acacattcac     480
agtgtttgtt tgatttcaac tgtgaattgt cttacagttt tttcaaacct agttgtttct     540
atggacacct gctctgaatt gtacccctca gtcaccagca aaagcatttc cacccctttc     600
aacccccaat cagaccactg cattcagtgg tattggagga ctttcatcac agcttccagt     660
aggtgggtct tggcacaggc agnctgactg gtatangaac tggtgctctt ggactccctg     720
cagtgaataa cgaccctttt gtacctgccc gggcggccgc taagggcgaa ttccacacac     780
tggccggccg ttactagtng gatccnaact cggtccaaan cttggcgtat tcatggtcnt     840
```

```
<210> 205
<211> 497
```

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(497)
<223> n = A,T,C or G

<400> 205
nnnnttgacc tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacatttact ataaaagctg 120
ttgcatttta gacaacttgt tgtttttatt ttttactgtt tctcagaggc attttagaat 180
aaatacttta aatgaaagtt agtataaccg atatagaaca ctggcccacc cagagcagta 240
acatcttttg gacggactca catatgaggt ggatcatttc agtttgttaa atcttacact 300
gtgtatagat aactataata tgtattgcat taatcacact acatagaaag gaaatgtcat 360
ggaagttcgc tagtgaaaaa caaaaagtta cccattattt ttattaaaga gtagggacta 420
gcttttggag tatgagaaaa aaaatcagat atacttcctc aggaacaata aatcactcac 480
ttgcctcacc tgtttt 497

<210> 206
<211> 820
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 206
gggcctntag aagcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtacatgt attgaagcta gaatcgagtc aagaaaaata 120
aagccccatt ctccaactgc aaaatgtgct ttcccataat gaacactagt caccagcaca 180
gaataatctc caacattttc taaattctaa ttgccaactg tttctattta tatttgattt 240
atatttcatt tggagtctgt tacatggcag cttaggcaga ctagatcttg tttttttccaa 300
tgcagcataa tgagtatgat ctatttcttt tcaaataatc tttgagatcc caggaaaaaa 360
aatgctctgc tccattgagc tataatgtaa atgtgtttgt ttaaaaaaca ggtgaggcaa 420
gtgagtgatt tattgttcct gaggaagtat atctgatttt ttttctcata ctccaaaagc 480
tagtccctac tctttaataa aaataatggg taactttttg tttttcacta gcgaacttcc 540
atgacatttc ctttctatgt agtgtgatta atgcaataca tattatagtt atctatacac 600
agtgtaagat ttaacaaact gaaatgatcc acctcatatg tgagtccgtc caaaagatgt 660
tactgctctg ggtgggccag tgttctatat cggtatact aactttcatt taaagtattt 720
attctaaaat gcctctgaga aacagtaaaa ataaaaacca caagttgcta aaatgcaaca 780
gcttttatag taaatgtcct tgggccgcga ccacgcttag 820

<210> 207
<211> 496
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G

<400> 207
cnnttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggcccgagg tacaaaagac aaaatcagag 120
ttcaatttca gcagcaagac ttatcaagaa tttaatcact atttgacatc aatggttggt 180
tgcctgtgga cgtccaaacc ctttgggaaa ggaatatata ttgaccctga aatcctagaa 240
aaaactggag tggctgaata taaaaacagt ttaaatgtag tccatcatcc ttctttcttg 300
agttacgctg tttccttttt gctacaggaa agcccagaag aaaggacagt aaatgtgagc 360

```
tctattcngg gaaagaaatg gagctggtat ttggactatt tattttcaca ngggttacaa     420
ggcttgaaac tttttataag aagtagtggt catcattctt ncattcccag agcagaaggc     480
ataaactgca caatca                                                     496
```

<210> 208
<211> 810
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(810)
<223> n = A,T,C or G

<400> 208

```
gcatgctcga cggcccgcca gtgtgatgga tatctgcaga aattcgccct ttcgagcggc      60
cgcccgggca ggtactcctt gaggatggca gtctgtcagt gaaatgaaaa tgggaactca     120
agatgagcca ctttgctcta gcaatgagga gtgagtttag tccagtgtgt tcagtttatg     180
tcaacattca tttaatattg attgttgcag tttatgccct ctgctctggg aatggaagaa     240
tgatgaacac tacttcttat aaaaagtttc aagccttgta acccctgtga aaataaatag     300
tccaaatacc agctccattt ctttccccga atagagctca catttactgt cctttcttct     360
gggctttcct gtagcaaaaa ggaaacagcg taactcaaga aagaaggatg atggactaca     420
tttaaactgt ttttatattc agccactcca gtttttctta ggatttcagg gtcaatatat     480
attcctttcc caaagggttt ggacgtccac aggcaaccaa ccattgatgt caaatagtga     540
ttaaattctt gataagtctt gctgctgaaa ttgaactctg attttgtctt ttgtacctcg     600
gccgcgacca cgctaagggc gaattccagc acactggcgg ccggtactag tggatccgag     660
ctcggtccaa gcttggcgta atcatgggca tagctgtttc ctggtgtgaa attgntatcc     720
gctcacaatt ccacacaaca tacgaaccgg aagcattaag tgtaaagcct ggggtgccta     780
atgagtgagc taacttacat taattgcgnt                                      810
```

<210> 209
<211> 495
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G

<400> 209

```
cnnttgacct gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta caactctcca gggcacaata     120
cgtttacagc tgcctttcct tcacatactt ttctaattca gaactactca caattctaag     180
caaattccca ttcacgaagt ctgtccataa tgcgaccttc tctttttta acatatacat      240
cttaaaaaac aaatatataa aaaattctta ttttgctgga atgctttcaa tttttcacat     300
tttacatgat catcacattt atttcttata ttgaaaggca tggtttctgt tgacatgtcg     360
tgcaaagcca aaaaaaaaaa anaaaaaaaa aagggctgga ttgcttttca attggtctaa     420
cacttttcct tgtctaggct ttggatttta aagttcatga cagccccacc accagtagaa     480
accccaaggc ttgca                                                      495
```

<210> 210
<211> 820
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 210

```
gggcctcaga gctgctcgan cggccgccat gtgatggata tctgcagaat tcgccctttc      60
gagcggccgc ccgggcaggt acccacgttt tgctccacac tccttgaccg caggggctcg     120
gacacaaacc cctgtcacca ggagagtcag tcagcactac ttgggagggc taaagggaaa     180
tttggaaata aaattccaaa gtttggagta aaaaaattca agtgttgatt ttatattctt     240
tccctttctg acacagccta aagcgtaggg ggaacatgtg tttatctgtg ggagataaac     300
aagatggagt cccaaagact ttaacaaaat atttttttaa aaatccacta gaatagaaaa     360
tacattattt agatatactt tatgctgaga gtgagtatat atgcttgtcc tatttaaact     420
tgtgagaaaa agtggtatcc cttgatacat ttagaaatat gggggctatc ttgtttcatt     480
gtgggggtgg ggcagaagga gaataaatgc aggatgaccc tgttgaagga atcttancat     540
ggccaacagg ggacgtttcc agtcgattac caggaaatgc aagccttggg gtttctactg     600
gtggtggggc tgtcatgaac tttaaaatcc aaagcctaga caaggaaaag tgttagacca     660
attgaaaagc aatccagccc ttttttttt nnnntttttt tttggctttg cacgacatgt      720
caacagaaac catgcctttc aatntaagga aataaatgtg atgatcatgt aaaatgtgaa     780
aaattgaaag cattncacca aataaggaat tttttatttn                           820

      <210> 211
      <211> 499
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(499)
      <223> n = A,T,C or G

      <400> 211
canttgactg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtcgc ggcccgaggt acaactctcc agggcacaat     120
acgtttacag ctgcctttcc ttcacatact tttctaattc agaactactc acaattctaa     180
gcaaattccc attcacgaag tctgtccata atgcgacctt ctcttttttt aacatataca     240
tcttaaaaaa caaatatata aaaaattctt atttgctgg aatgctttca atttttcaca      300
ttttacatga tcatcacatt tatttcttat attgaaaggc atggtttctg ttgacatgtc     360
gtgcaaagcc aaaaaaaaaa aaaaaaaaaa aagggctgga ttgcttttca atngggtcta     420
acacttttcc ttgtctaggc tttggatttt aaagttcatg acagccccac caccagtaga     480
aaccccaagg cttgcattt                                                  499

      <210> 212
      <211> 821
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(821)
      <223> n = A,T,C or G

      <400> 212
gggcccntan agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt      60
tcgagcggcc gcccgggcag gtacccacgt tttgctccac actccttgac cgcaggggct     120
cggacacaaa cccctgtcac caggagagtc agtcagcact acttgggagg gctaaaggga     180
aatttggaaa taaaattcca aagtttggag taaaaaaatt caagtgttga ttttatattc     240
tttccctttc tgacacagcc taaagcgtag gggggaacatg tgtttatctg tgggagataa    300
acaagatgga gtcccaaaga ctttaacaaa atattttttt aaaaatccac tagaatagaa     360
aatacattat ttagatatac tttatgctga gagtgagtat atatgcttgt cctatttaaa     420
cttgtgagaa aaagtggtat cccttgatac atttagaaat atgggggcta tcttgtttca     480
ttgtgggggt ggggcagaag gagaataaat gcaggatgac cctgttgaag gaatcttagc     540
atggccaaca ggggacgttt ccagtcgatt accaggaaat gcaagccttg gggtttctac     600
tggtggtggg gctgtcatga actttaaaat ccaaagccta gacaaggaaa agtgttagac     660
caattgaaaa gcaatccagc cctttttttt tttttttttt ttggctttgc acgacattgt     720
taacagaaac catgcctttc aatattagaa ataaatgtga tgatcatgtt aaatgtgaaa     780
aattggaagc cttcagcaaa ataagaattt ttatttnttt n                         821
```

<210> 213
<211> 497
<212> DNA
<213> Homo Sapien

<400> 213
```
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta caaaacaata gtctaaacta     120
acacgaactg ttacctggtc tattaaagga tacacggtat ccactaaaca gacagatcct     180
tatttccctg cttgatgttg caaagccctt ggcaaccagg ggcaaaggtc actggggttt     240
gactaactgg ggctgagtgg cagctatgac tgtccttcag atttttgagt tgtttttgaa     300
attaaaagct tctaaaagtt gcatcaacat cctcctaagc ccccatagga ttgtaacacc     360
accacaaaag gccaccaaca ctttttaaac aaagtgaaaa ctgtctgaca ccaatcatct     420
tgaaaactcc atggcaagtg cattagctat gatttcatca cttacaggta gagaagctta     480
ctgtctactg gtgtggg                                                    497
```

<210> 214
<211> 817
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(817)
<223> n = A,T,C or G

<400> 214
```
ggccttanag ctgctcgncg gccgccatgt gatggatatc tgcagaattc gccctttcga      60
gcggccgccc gggcaggtac tctcagtcat atgcagaaat acttttttttt taattaatag    120
ttacaggctt gttggtccag tgggatttgg gtagggggag aaagatacct tctaaaatgg     180
atcaatagaa ccaaaataat acagcatgtt ctataaccac aaggaaatca aatgatcctg     240
tcatgattcc agttagtcat aaccatgtta gcagtgctaa atgcatttta gaaatggtga     300
cttctgtggt tttcctagca tttgtctcta acaaatggtg aaataattac tcatggccct     360
ctctgccatt gtctttcatt ttttcacagt gaaattagac ccctttactt caccattctg     420
ccactgcaaa ttaagtataa agaaaatagc aagagtgtcc acaccagtag acagtaagct     480
tctctacctg taagtgatga aatcatagct aatgcacttg ccatggagtt ttcaagatga     540
ttggtgtcag acagttttca ctttgtttaa aaagtgttgg tggccttttg tggtggtgtt     600
acaatcctat gggggcttan gaggatgttg atgcaacttt tagaagcttt taatttcaaa     660
aacaactcaa aaatctgaag gacagtcata gctgccactc agccccagtt agtcaaaccc     720
cagtgacctt tgcccctggt tgccaagggc tttgcaacat caagcangga aataaggatc     780
tgnctgttag tgggataccg ggtatccttt aatagac                              817
```

<210> 215
<211> 495
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G

<400> 215
```
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtccg gccgaggtac catgctgact tcttggtatc     120
ttttaaggcc taatttcccc ttccttgaga ttactgtagt gtgttccagc taatttctat     180
ttggaaacga gttggaacag ctgaaaacta ggtattattg aaggcaaagc agcctcacgt     240
cagtttttta tcagctcatt tgggaagttt ttttttttt tttttaatt aattagaaag      300
taggctgggc acggtggctc atgcctataa tcccagcact tggggaggcc gaggatctcc     360
tctctggtgg atcacttgag ggcaggagtt aagagaccat cctggccaac atgatgaaac     420
cctgtctcta ctaaaaatac aaaaagtagc tgggcgtggt ggcatactct tacaatccca     480
gctacttggg aggcn                                                      495
```

<210> 216
<211> 823
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(823)
<223> n = A,T,C or G

<400> 216
```
gggcctcaga gcatgctcgn cggccgccag tgtgatggat atctgcagaa ttcgcccttt      60
cgagcggccg cccgggcagg tacttttttt tctttttttta catctgattt taatgcttcg     120
ttaacttcaa aaggaactgg tagagttcag aaggtgagct gttgtttttc taaacctctt     180
cccaggaagg ggacattgac acttgaattt ttgtcacctt tttcctcatt agaaggaaag     240
tagaaagcct tactgtagga tttttaaaaa aaaatccatc tcaccccata ttggtcttaa     300
ataagtatag actaattaac ctaagctacc tttaacaacg tagaatttag atgggttcat     360
atatgtgaga aaaacctgaa tataggacag gggtcctact tttttcccca cctctgtcgc     420
ccaggctaga gtatagtggt gtgatcttgg cccactgcaa cctctgcttc ctaggttcaa     480
gtgattctcc tgcctcagcc tcccaagtag ctgggattgt aagagtatgc caccacgccc     540
agctactttt tgtattttta gtagagacag ggtttcatca tgttggccag gatggtctct     600
taactcctgc cctcaagtga tccaccagag aggagatcct cggcctnccc aagtgctggg     660
attataggca tgagccaccc gtgcccagcc tactttctaa ttaattaaaa aaaaaaaaaa     720
aaaaacttnc caaatgagct gatnaaaaac tgacgtgang ctgctttgcc ttcaataata     780
cctagttttc actggtccaa ctcgtttcca aatagaaatt acg                       823
```

<210> 217
<211> 827
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(827)
<223> n = A,T,C or G

<400> 217
```
nnnnnnnggc ctntnnagca tgctcgacgg ccgccatgtg atggatatct gcagaattcg      60
ccctttcgag cggccgcccg ggcaggtact gtatcattgg cagatgtgac gtcaccgaca     120
accagagtga agtggcggac aaaactgagg attacctgtg gctgaagttg aaccaagtgt     180
gttttgacga cgatggcacc agctccccac aagacaggct cactctctca cagttccaga     240
agcagttgtt ggaagactat ggcgagtccc actttacggt gaaccagcaa cccttcctct     300
acttccaagt cctgttcctg acagcgcagt ttgaagcagc agttgccttt cttttccgca     360
tggagcggct gcgctgccat gctgtccatg tagcactggt gctgtttgag ctgaagctgc     420
ttttaaagtc ctctggacag agtgctcagc tcctcagcca cgagcctggt gaccctcctt     480
gcttgcggcg gctgaacttc gtgcggctcc tcatgctgta cctcggccgc gaccacgcta     540
agggcgaatt ccagcacact ggcggccgtt actagtggat ccgagctcgg taccaagctt     600
ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca     660
caacatacga gccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact     720
cacattaatt gcgttgcgct cactgcccgc ttttcaatcg ggaaacctgt cgtgccagct     780
gcattaatga atcggncaac gccccgggan aagcggtttg cgtattt                   827
```

<210> 218
<211> 498
<212> DNA
<213> Homo Sapien

<400> 218
```
cacttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtactttttt ttttttttt     120
taattcccac aacaacccat ttcaaaatga gaaaactagg ttgagtgact tgtccacagt     180
```

tccaaagcta ataaaaatga tgaggcatat ttctcttctg ggcccactgt attcagttct 240
ttgttcttta cactgagtgc cgaaaaaaaa aaatcagact attttgattc tagaaagtga 300
gataattgaa aatgttaaca tatttctcca aaactgatca gactgtggag tctgtcactt 360
ttttggtata ataaaggagt ttgaagaaac aaatgacatc attcctgatg atggtagccc 420
actccaacaa aggcgtatat atgtaggcaa gtttgaagat atctataaga gcattaaaag 480
gcaagtgcac cattgtgg 498

<210> 219
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 219
ggcctntnga gctgctcgac ggccgccatg tgatggatat ctgcagaatt cgcccttagc 60
gtggcgcggc cgaggtacct agaaaacaga aacttgagta gacatggtaa tgaccagaaa 120
aggctatctt tatacatttc ttttgctacg cttcaaattc atgtcaccta aaagttgtga 180
agtgcacaaa acaaatctac ttaactgaaa attattttca atgaatggga tgtttagaac 240
tctgtgaggg tttttaaggt cttttcgaat agcaaattct aatgaggctt ttttaagttg 300
gcaatttaaa ctcatacaag aaataaaaac tcaccagtgt ggctgggcag aatatatata 360
ttttctcaaa tattgtttgt ttgtttttc cctgcactgt atccatggtc ccatgatgaa 420
actgttatat tgctgatata tttattggaa tatgtgggcc aacttccttt ccactcaaca 480
tatggattgg tagtttaaaa taattccttt ctattaagca aatgtgtggc taaggcacat 540
ttaaatagcc cattaaacca atgagatgac aatgtgttac cctcagagaa agcttaattt 600
ttggagtaat caattacaca tatcacagaa tgtctcatga gaacattttt ggctaggtct 660
accaatttat catgcaaata attatagatt ttcatttgag gcaaagatgc tgattcatca 720
ttagtaacat ggtcacaaat aatcatttat tttattttgg taacatctgt ctttcctgtg 780
gggaaactta ctatatgctc tacgttaatt aaattaaa 818

<210> 220
<211> 497
<212> DNA
<213> Homo Sapien

<400> 220
cacttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgcccttt tcgagcggcc gcccgggcag gtacagccat gaaattgttg 120
ctactcatag aaagtcttag tatagtttgg tttaaacatt ttaaaattgc aaataaatat 180
agatagataa tatcatgatg agaaggtcac gggaagcctg gagatttcag ggtgctcttt 240
cataattgga gcgagaatca tgtaacagtt aagaaactaa actcttgagc cttcatagtc 300
tttgctttct ccccatttat ttatctgata ttatataccc tctttaatta tagactggac 360
tgaaatattt tatttttgtt ttattataaa aaatcctact cgtctttaac atgttctctt 420
aaagagtgtt tcatatataa atactttccc cccaaaatat aaagaggcta accactatag 480
tattgaaaga ttgaaag 497

<210> 221
<211> 831
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(831)
<223> n = A,T,C or G

<400> 221
cnnnannggg cctntanagc atgctcgacg gccgccatgt gatggatatc tgcagaattc 60
gcccttagcg tggtcgcggc cgaggtacaa tgaaagtatg agctacctct ctgaagtctg 120

```
gaaaccttga gagtattaag gttacatgca taaaatcttt aaaatggaag tgtcattaca      180
tggtaaacca attcaaatta aaaataatct catgctgtga aagcaaaata tataactggt      240
ttacccattc ataggtaatt gcacgtcttt gttacatctc aatagtttct ttgtatttgt      300
tgcaatcacc ctccttcttc tcaacactct tttctacctc catgtaactg ctgttgtgaa      360
ttctttataa tattctcatc aatgtttaaa gatgaagttt aaagtgctta caaaggaagc      420
attttaactc ctcttagaac tgagccttta aatttggttt tagacacccct aggtctttct     480
ttcaatcttt caatactata gtggttagcc tctttatatt ttggggggaa agtatttata      540
tatgaaacac tctttaagag aacatgttaa agacgagtag gattttttat aataaaacaa      600
aaataaaata tttcagtcca gtctataatt aaagagggta tataatatca gataaataaa      660
tggggagaaa gcaaagacta tgaaggctca agagtttagt ttcttaactg gtacatgatt      720
ctcgctncaa ttatgaaaga gcaccctgaa atctncangc ttnccgtgac cttctcatca      780
tgatattatc tatctatatt tattgcaatt ttaaaatggt taaaccaaac n               831
```

<210> 222
<211> 497
<212> DNA
<213> Homo Sapien

<400> 222

```
cacttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca       60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actctttctc tcccctcctc      120
tgaatttaat tctttcaact tgcaatttgc aaggattaca catttcactg tgatgtatat      180
tgtgttgcaa aaaaaaagtg tctttgttta aaattacttg gtttgtgaat ccatcttgct      240
ttttccccat tggaactagt cattaaccca tctctgaact ggtagaaaaa catctgaaga      300
gctagtctat cggcatctga caggtgaatt ggatggttct cagaaccatt tcacccagac      360
agcctgtttc catcctgttt aataaattag tttgggttct ctacatgcat aacaaaccct      420
gctccaatct gtcacataaa agtctgtgac ttgaagttta gtcagcaccc ccaccaaact      480
ttatttttct atgtgtt                                                      497
```

<210> 223
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 223

```
gggcctnaga gctgctcgnc ggccgccatg tgatggatat ctgcagaatt cgcccttcga       60
gcggccgccc gggcaggtac tttattttca aaaaactcat atgtcgcaaa aaacacatag      120
aaaaataaag tttggtgggg gtgctgacta aacttcaagt cacagacttt tatgtgacag      180
attggagcag ggtttgttat gcatgtagag aacccaaact aatttattaa acaggatgga      240
aacaggctgt ctgggtgaaa tggttctgag aaccatccaa ttcacctgtc agatgccgat      300
agactagctc ttcagatgtt tttctaccag ttcagagatg ggttaatgac tagttccaat      360
ggggaaaaag caagatggat tcacaaacca agtaatttta aacaaagaca cttttttttt      420
gcaacacaat atacatcaca gtgaaatgtg taatccttgc aaattgcaag ttgaaagaat      480
taaattcaga ggaggggaga gaaagagtac ctcggccgcg accacgctaa gggcgaattc      540
cagcacactg gcggccgtta ctagtggatc cgagctcggt accaagcttg gcgtaatcat      600
ggtcatagct gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag      660
ccggaagcat aaagtgtaaa gcctggggtg cctaatgagt gagctaactc acattaattg      720
cgttgcgctc actggccgct tttcagtcng gaaacctgtc gtgccagctg cattaatgaa      780
tcggccaacg cgccgggaga ngcngnttgc gtattgggcc cn                         822
```

<210> 224
<211> 494
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(494)
<223> n = A,T,C or G

<400> 224
cncttgacnt gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta cttttttttt ttttttaac 120
caactcaata tgtgtttgat gatagtgaat tgataaaacc cgaagctttt ccctgtaaat 180
cttacatctt tgcctttaaa gaatgggtta caaccatcac tagatcacag tagtgcctaa 240
tgaaggttga gaaccgtagg agaggctctc atgctgtaaa taatgttgca ggctaataac 300
ctttcatcac ttcctttgtg cgcttcctgc cttaagtgac aagtagcaac atggcttggg 360
tcccctgtgc agcatcagct tatgctgcca caagtcagtt tgcaccctag gtgcccagga 420
gctagtatcc ttagatcttt ctatcgctaa cttaattctc ttcgttattt atctgaccct 480
ctaactccat gtct 494

<210> 225
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 225
gggccttnga gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgcccttcg 60
agcggccgcc cgggcaggta ctttaatttt gcttgttcaa atgatctaca cttacatttt 120
gcaaatcttt ttttttaaat tttttaaatt ttatattttt tttccagcca actcaaggcc 180
aaaaaaaatt tcttaatata gttattatgc gaggggaggg gaagcaaagg agcacaggta 240
gtccacagaa taagacacaa gaaacctcaa gctgtgaggt caatttgtaa ttaaaagaat 300
actaagatta gatgaacaca acactcagaa atactctagg agagctgaaa aagaaggaac 360
agatgttaac aaaacaaatt aaggctgctg gggaacctga gtccatgtta agcttgggtt 420
gactgtaaag aatttttttt tttaatgcaa gttagacatg gagttagagg gtcagataaa 480
taacgaagag aattaagtta gcgatagaaa gatctaagga tactagctcc tgggcaccta 540
gggtgcaaac tgacttgtgg cagcataagc tgatgctgca caggggaccc aagccatgtt 600
gctacttgtc acttaaggca ggaagcgcac aaaggaagtg atgaaaggtt attagcctgc 660
acattattta cagcatgaga gcctctccta cggttctcaa ccttcattag gcctactgtg 720
atctantgat ggntgtaccc attctttaaa ggcaaagatg taaggattta cagggaaaag 780
cttcgggttt tatcaattca ctatcatcaa acacatattg ng 822

<210> 226
<211> 498
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

<400> 226
anntaaacta tgacctgatt acgccaactt ggtaccgagc tcggatccac tagtaacggc 60
cgccagtgtg ctggaattcg ccctttcgag cggccgcccg ggcaggtacc ctctcatata 120
tgcaaacaaa tgcagactag gcctcaggca gagactaaag gacatctctt ggggtgtcct 180
gaagtgattt ggacccctga gggcagacac ctaagtagga atcccagtgg gaagcaaagc 240
cataaggaag cccaggattc cttgtgatca ggaagtgggc caggaaggtc tgttccagct 300
cacatctnat ctgcatgcag cacggaccgg atgcgcccac tgggtcttgg cttccctccc 360
atcttctcaa gcagtgtcct tgttgagcca tttgcatcct tggctccagg tggctccctc 420
agtctggact ctaccacttg ggtctccaga ttttctgtta cgtccttgtg ggtcaggata 480
tttctggaag tcactccg 498

<210> 227

<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 227
```
gggcctctna agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag      60
cgtggtcgcg gccgaggtac attgatgggc tggagagcag ggtggcagcc tgttctgcac     120
agaaccaaga attacagaaa aaagtccagg agctggagag gcacaacatc tccttggtag     180
ctcagctccg ccagctgcag acgctaattg ctcaaacttc caacaaagct gcccagacca     240
gcacttgtgt tttgattctt ctttttcccc tggctctcat catcctgccc agcttcagtc     300
cattccagag tcgaccagaa gctgggtctg aggattacca gcctcacgga gtgacttcca     360
gaaatatcct gacccacaag gacgtaacag aaaatctgga gacccaagtg gtagagtcca     420
gactgaggga gccacctgga gccaaggatg caaatggctc aacaaggaca ctgcttgaga     480
agatgggagg gaagccaaga cccagtgggc gcatccggtc cgtgctgcat gcagatgaga     540
tgtgagctgg aacagacctt cctggcccac ttctgatcac aaggaatcct gggcttcctt     600
atggctttgc ttccactggg attcctactt aggtgtctgc cctcaggggt ccaaatcact     660
tcaggacacc ccaagagatg tcctttagtc tctgctgagg cctantctgc atttggttgc     720
atatatgaaa aggtacctgc ccgggccggc cgttcnaang gcgaatttca gcacactggc     780
ggncgntact agtggatccc aactcggtac caagc                                815
```

<210> 228
<211> 512
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(512)
<223> n = A,T,C or G

<400> 228
```
annnnntttn acctannact atgacctgat tacgccaact tggtaccgag ctcggatcca      60
ctagtaacgg ccgccagtgt gctggaattc gccctttcga gcggccgccc gggcaggtac     120
taggtttgca aaaccaatag catgcacatg tgttgggctg aggttcatgt gtcagagact     180
cagttgtaga aggaactttg aatctggcag gcacttaact gtggctgctc agaactaatg     240
tatctggggc tgcttgagca ggggctgagg tcagaggcag ggagtgagct ctccatcatc     300
cttgactcag acccagctcc gcaggagctc catggtcatc cctggagctc atgtggagtg     360
caaggtccgg gagtgggggc gctgacagaa acaaatctgg ggggatcagc cagggtcagc     420
aggggacaga gatcatgtct tttagaagaa tgtgggcttc ctgacctata gaagggcagc     480
tgttcacccc ctgcagatga tagcagggat ng                                   512
```

<210> 229
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 229
```
gggcctnaga gcatgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag      60
cgtggtcgcg gccgaggtac tttttttttt tttttttttt ttcagagata ggttcttact     120
atgctgccct ggctggagtg cagtggcttt cttaggggca atcacagctc actgcagcct     180
ggaactcctg ggctcagcct cctaagtagt tgagactacc aatgcacgcc accatacctg     240
gccttagata ccccctgtat cctggaactc actccttata agagacactg aatgtggaag     300
```

tcttcgcaga tattaagggc actgcccagt tcctgtcttt gaattattgg gccaacaaca 360
gaaaggcgct cctgaggccc cagatcatcc ctgctatcat ctgcaggggg tgaacagctg 420
cccttctata ggtcaggaag cccacattct tctaaaagac atgatctctg tcccctgctg 480
accctggctg atccccccag atttgtttct gtcagcgccc ccactcccgg accttgcact 540
ccacatgagc tccagggatg accatggagc tcctgcggag ctgggtctga gtcaaggatg 600
atggagagct cactccctgc ctntgacctc agcccctgct caagcagccc cagatacatt 660
agttctgagc agcccagtta agtgcctgcc agattcaaag ttccttctac aactgagtct 720
ctgacacatg aaccttaagc ccaacacatg tgcatgctat tgggttttgc aaacctagta 780
cctgnccggg cgggccgttc gaaanggcga attct 815

<210> 230
<211> 502
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 230
tnnanctana cttgacctga ttacgccaac ttggtaccga gctcggatcc actagtaacg 60
gccgccagtg tgctggaatt cgccctttcg agcggccgcc cgggcaggta cacagagatg 120
cggtccagct gcaggtcgct gtccccgtgg taggtgccgg tggggtcgat gccatgttca 180
tcactgatca cctcccagaa cttggcaccg atctggtagc cacactgacc agcctggatg 240
tgcacgattt ccctcatggt taaaatttaa tttttttgct cgcctcaagg tatgtatggg 300
gcaagaaaat aagtaatttt ttttctccgc aggtcgcagg ctggaaggtt ggaatgcgcc 360
ccagaggctg gagcagcgag gtgcaaacgc gacggcagga aggttctgag agccccgcgt 420
acctcggccg cgaccacgct aagggcgaat tctgcagata tccatcacac tgcggccgct 480
cgagcatgca tctagagggc cc 502

<210> 231
<211> 817
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(817)
<223> n = A,T,C or G

<400> 231
nngggcctct nnagctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
agcgtggtcg cggccgaggt acgcggggct ctcagaacct tcctgccgtc gcgtttgcac 120
ctcgctgctc cagcctctgg ggcgcattcc aaccttccag cctgcgacct gcggagaaaa 180
aaaattactt attttcttgc cccatacata ccttgaggcg agcaaaaaaa ttaaatttta 240
accatgaggg aaatcgtgca catccaggct ggtcagtgtg gctaccagat cggtgccaag 300
ttctgggagg tgatcagtga tgaacatggc atcgacccca ccggcaccta ccacggggac 360
agcgacctgc agctggaccg catctctgtg tacctgcccg ggcggccgct cgaaagggcg 420
aattccagca cactggcggc cgttactagt ggatccgagc tcggtaccaa gcttggcgta 480
atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc cacacaacat 540
acgagccgga agcataaagt gtaaagcctg gggtgcctaa tgagtgagct aactcacatt 600
aattgcgttg cgctcactgc ccgctttcca gtcgggaaac ctgtcgtgcc agctgcatta 660
atgaatcggc caacgcgcgg ggagaggcng nttgcgtatt gggcgctctt ccgcttnctc 720
gctcacttga ctcgcttgcg ctcggtcgtt cngcttgcgg cnanccggat tcagcttact 780
taaaggcggt aataccggtt atccaccaga attangg 817

<210> 232
<211> 481
<212> DNA
<213> Homo Sapien

<400> 232
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacaaattt gttgtgtttt 120
ttatgttcta ataatactga gacttctagg tcttaggtta atttttagga agatcttgca 180
tgccatcagg agtaaatttt attgtggttc ttaatctgaa gttttcaagc tctgaaattc 240
ataatccgca gtgtcagatt acgtagagga agatcttaca acattccatg tcaaatctgt 300
taccatttat tggcatttag ttttcattta agaattgaac ataattattt ttattgtagc 360
tatatagcat gtcagattaa atcatttaca acaaaagggg tgtgaaccta agactattta 420
aatgtcttat gagaaaattt cataaagcca ttctcttgtc attcaggtcc agaaacaaat 480
t 481

<210> 233
<211> 809
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(809)
<223> n = A,T,C or G

<400> 233
gggcctctnn agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgccctta 60
gcgtggtcgc ggccgaggta caaaagatac tgttcacccc attagagaac tgatttgaag 120
ttactcttcc ctgtgagggc tctgtcatct taactgtatt cacatacttt caactgttcc 180
ccttgctgct aacctcaggt tctttagttc atctatctgg cagagctgat ttggggaaaa 240
caagacaaac cttgtcaggt tttcttaata aataagcagt tgtcatgttt caagagtttt 300
agaaatgagc aataatcaag gaagaggaca acgattgcat acgtttataa tatttagaac 360
atcttttgcc acaataaaca ctggaaacca cccacttgtg gacaccaaac atttggattt 420
gtatattttg tggcattccc tcactctaat cctctcatcc ttaaaaattt tcagaaattt 480
ttgcagcaac aaacactgat tgcaacatat gatttagggt agatttatga accatttttt 540
cactgaaata catcaacagg agtgagtagt ctgagtgacc accccagcat ggagaaaact 600
gtagtttaca gattcttctg gagcattttt atttctagat tgcagtggaa gtctaacccc 660
ccttggagat gtctgcctta aagggtcttt ggccagggtc ctctgtagag ccatagtcca 720
gatctactct atttgngtgc tccttacaac atcagaacag caactctcaa tccggatcat 780
cccagaatgc cgctgagtca cagcgtggg 809

<210> 234
<211> 482
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 234
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tcgagcggcc gcccgggcag gtactgaaaa gaagatagtg 120
ccatttgaaa caacagatgc atcttttata catttcaca agttngtttt tcatattttt 180
aaaggcccca tttatctgta acagtggtat ttttatttag agtatcggct acttaatata 240
tacatgcaac aatatatgct ttaatagtca tttaactttt angaatattt catnacatta 300
agtggttaag catagcgtta aaagagtgga atataaggaa tannaanntn tngaaaatac 360
gctgctannt tcattngcan actatagtag aatggagatg cccataaaag tgatcattgc 420
ccaactgaat tcctacccng aactaacatg tgattctcaa gtgggganaa atattattaa 480
aa 482

<210> 235
<211> 474
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 235
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta cattacttgg tgttaacatt 120
gttggcagtg gtagcccctt ttcagaaagc aacttgctgt aagtcagggt gtccgttcca 180
accttcagct agtgaaaagg tagtaacaaa tggtaaacaa gagaatgatt gtttaaacct 240
atctgtggac acttaatgca actgtttaaa aatgataatc acgagttatg tagcaacgtg 300
gaaatatatt tacagaacat taatggagaa gcagggacac gaagtatatt atactacagt 360
tataactcaa cagtcattat atgccggtca tttaccagtc atttaaccag ttcattataa 420
ctgtttaaaa atatatatgc ttatagtcaa aagctgttgt ggtgttgttg ttgn 474

<210> 236
<211> 819
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(819)
<223> n = A,T,C or G

<400> 236
gggccttnna gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt actttttttt tttttttttt tttttatttt taactttatt 120
tttattgntg acactattac agatagaatg accacaacca tattaacaaa ccaaaaacct 180
gtgcacagaa acaagatgaa gaaaatatat caagatgtta aacacactct ttggatggtg 240
aaaacatggg tgagtttctc ttctacattt ctgtaacttc aaagtttcta taatgaacac 300
atttcatata taatggaaat atatgtagta aaggtggact accaaaacac tagaatgatg 360
acctttcaag gaaaccgaaa caaaataacc ataatcccac aacaaccaca caactatttc 420
ttgnttttca tctttcttcc catctttgac atttatgcat acttatcact aacaccctaa 480
taatcacaga ctagtgcaca gatcaagatg ttaacagtta attgttgttg ggtgttggga 540
atatgtgtga attttcttta ctgaatttcc aaagttttgt atgagtatgt attatatttg 600
taatggaaaa tacatacata aaatttatta ccaaaacacc aaagattatt taagggaatt 660
tgagacaaaa tatttaacca aattcccaca atgacaacac tattttagtt attttccaca 720
tcttttcatt taagacttta tgcacacata tttaacactg gtatcacaag cgtgggcact 780
gaaacaagga tnganggaac nggatcagga tgttagccg 819

<210> 237
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 237
agcttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actaagctca gcatgtctca 120
tggtcaatta ctgcgtattt ccaaaaaatg tgttgtttgg tcttgagaaa attctttagc 180
cccttgacac cagaattatc tccactgtag aaaaaataga caattatagt ctaacaggta 240
aatcacaaaa attcttcagc cacacttcct gggttcaaat gtggtttttc tactcagtaa 300
tattgtaacc ctgggcaagt tatttaactt gtctaagtct cagtttctcc atctgtaaaa 360
tgaggataat cacaatatct actacataat gttcttctga agatgtaatg agataatcca 420
tgtnaaatat tcanacagca cataggaatg ggtcatttaa tgtttatcat tacttgccta 480
ttt 483

<210> 238
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 238
```
gggcccntnn agctgctcgn cggccgccag tgtgatggat atctgcagaa ttcgcccttt      60
cgagcggccg cccgggcagg taccattatt tttcattcaa taccatatgt ctgaaaaata     120
ggcaagtaat gataaacatt aaatgaccca ttcctatgtg ctgtctgaat attttacatg     180
gattatctca ttacatcttc agaagaacat tatgtagtag atattgtgat tatcctcatt     240
ttacagatgg agaaactgag acttagacaa gttaaataac ttgcccaggg ttacaatatt     300
actgagtaga aaaaccacat ttgaacccag gaagtgtggc tgaagaattt ttgtgattta     360
cctgttagac tataattgtc tattttttct acagtggaga taattctggt gtcaaggggc     420
taaagaattt tctcaagacc aaacaacaca ttttttggaa atacgcagta attgaccatg     480
agacatgctg agcttagtac ctcggccgcg accacgctaa gggcgaattc cagcacactg     540
gcggccgtta ctagtggatc cgagctcggt accaagcttg gcgtaatcat ggtcatagct     600
gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag ccggaagcat     660
aaagtgtaaa gcctggggtg cctaatgagt gagctaactc acattaattg cgttgcgctc     720
actgnccgct ttccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggncaacg     780
cgccggggag aggcngnttg cgtattgggc gctct                                815
```

<210> 239
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 239
```
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actttttttt tttttttttt     120
tttttttta gcgagcaagt atggnttatt acggacaaat ggtagaaaaa tgttactaat      180
atccatagat aagttcctta agtcatgtag agagactgtt attaaaagtt tgctgcattt     240
ttctattgaa tcaagaacta gctaccagtt acagtgcctt ctaaacacac agttagcttt     300
gctttatcaa taaccaaata ataaactagg tcccaatggt tttgtccaca tntagattgt     360
tcaggtgatc aggaactctt ttatttgtgt gctttagctt ttagttcttg gttatatctc     420
caaatacgaa aaagctgaga ggctcctact gccccccacaa agaaattaac agcaaacaga    480
ctt                                                                   483
```

<210> 240
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 240
```
gggcctntna gctgctcgac ggccgccatg tgatggatat ctgcagaatt cgccctttcg      60
agcggccgcc cgggcaggta caaccatcca gcaggtccca gaacagtttt cttctgggct     120
ccaattatga aatgggggtt ggtgtgtgct ggattggctg atatggccag acctgcagaa     180
```

```
aaacttagca cagctcaatc tgctgttttg atggctacag ggtttatttg gtcaagatac      240
tcacttgtaa ttattccaaa aaattggagt ctgtttgctg ttaatttctt tgtgggggca      300
gtaggagcct ctcagctttt tcgtatttgg agatataacc aagaactaaa agctaaagca      360
cacaaataaa agagttcctg atcacctgaa caatctagat gtggacaaaa ccattgggac      420
ctagtttatt atttggttat tgataaagca aagctaactg tgtgtttaga aggcactgta      480
actggtagct agttcttgat tcaatagaaa aatgcagcaa acttttaata acagtctctc      540
tacatgactt aaggaactta tctatggata ttagtaacat ttttctacca tttgtccgta      600
ataaaccata cttgctcgct aaaaaaaaaa aannnnnaaa aaaaaaagta cctcggccgc      660
gaccacgcta agggcgaatt ccagcacact ggcggccgtt actagtggat ccgagctcgg      720
taccaagctt ggcgtaatca tggtcatag ctggttcctg tgtgaaatgg tatccgntca      780
caattncaca caacatacga accggaagcc ttaag                                 815
```

<210> 241
<211> 486
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(486)
<223> n = A,T,C or G

<400> 241

```
agctatgacc atgattacgc caagcttggt accgagctcg gatccactag taacggccgc       60
cagtgtgctg gaattcgccc ttagcggccg cccgggcagg tacttcccac cactggaaat      120
gttagcataa aagaacttgg agaggaaaaa agtattaaca aaactgcagt ctgcactctt      180
taaacctgtt taaggctctt catcctggtt agcaaaaggt gtgaatgtaa tgtgatggaa      240
tttaaaagtt ttatgagacc aggcacagtg gctcacgact gtaattccag cagtttagga      300
agccgaagtg tgcagatcac ctgaggtccg gagaccagcc tggccaacat ggtgaaaccc      360
tgtctctact agaaatacaa aaattagcca ggtgtggtgg cgggcgcctg taatcccaac      420
tactcaggag gctgaggcta gagaatcact tgaacccagc angcggaggt tgcggtgagt      480
cganat                                                                 486
```

<210> 242
<211> 481
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

<400> 242

```
anttgacctg attacgccaa gcttggtacc gagctcggat ccctagtaac ggccgccagt       60
gtgctggaat tcgcccttcg agcggccgcc cgggcaggta catcagtgtt cattttatta      120
tttcttacac tgtcttcatg acttacacat aatattttgc tagttttaaa acataagatg      180
tgataataat ctaaacagac caaaggaaat aaatgaatat gattaaaaaa agacagagaa      240
taagccctgt ctgatggaaa gcataacaaa gcaggtagaa caactgtcag gaatgcttga      300
tccaataaag ctaggtttgt gatccacaac acttcagcat tttaatgtga tttttgatgt      360
tngctttttg caatggtgat tctcagttgc ctccctcctg tgtctttaca agctgaaatc      420
aagtgaagct acttctgact ttttctaaaa cttaaaccca acatgaaggt ctgcgtattc      480
t                                                                      481
```

<210> 243
<211> 824
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(824)

<223> n = A,T,C or G

<400> 243

```
cnannggg cc tntnnagcat gctcgacggc cgccatgtga tggatatctg cagaattcgc      60
ccttagcgtg gtcgcggccg aggtacataa tactttagat aaacattttt agaataactt     120
tattataact cgataagcaa aataatccaa acctttatac atttctacaa ggatagtcac     180
atatgtcaat ttttcggttt cctctcgtgc ctattttgtc tcctgagccg gccccttccc     240
agctgacacg tgtgctccgt gttctcccac aatagtgtga cctggcctga gtccatgccg     300
ccgtgagcct cctttctgtg cttacaacag cagcctgcct gatgtcagtt atggactatt     360
ctttctttca gcctcatttc agggtcctct gcctcttaga gctgctgctg tagcttagct     420
agagacccgc tgctgttgca tcatggaaaa gtgccacata cgtgcacatg tgaaagaata     480
cgcagacctt catgttgggt ttaagtttta gaaaaagtca gaagtagctt cacttgattt     540
cagcttgtaa agacacagga gggaggcaac tgagaatcac cattgcaaaa agcaaacatc     600
aaaaatcaca ttaaaatgct gaagtgttgt ggatcacaaa cctagcttta ttggatcaag     660
cattcctgac agttgttcta cctgcttttg ttatgctttc catcagacag ggcttattct     720
ctgtcttttt taatcatatt catttatttc ctttggtctg tttagattat tatcacatct     780
tatgttttaa aactagcaaa atattatgtg taagtcatga agnt                      824
```

<210> 244
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 244

```
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggcccgcc      60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtacgcggg ggcagggtgt     120
ttaatcgtcg ccaagcggga cttactgcaa gctatcaaat ctgaggtctt attttgttga     180
gtcgaaagtg aaatttttcct ttggccaacg tgacagggct ttgtttggtg gtaaaaaggg    240
ttactagaca cccctcattc cactgccact ggagggcgca tttctcagct cttgctcttc     300
aaacctgctg aaaggaattc ctagatctaa acaccagcat ttgacattgt gcagcaaana     360
aatggttatg ganaagccca gtccgctgct tgtanggcgg gagtttgtga ggcaatatta     420
tactttgctg aataaagctc cggaatattt acacaggttt tatggcagga attcttccta     480
tgt                                                                   483
```

<210> 245
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 245

```
ttgggcccnt nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct      60
tagcgtggtc gcggccgagg tacttcccct cgaaacataa tcggttttgc aattaagatt     120
ctctgaactg gttcagagtc atcaaaaacc acaaaaccaa aatttggaag ctttccccca     180
acaccccttgg tattgatgcg aagttccaca acgtttccaa aactcatgaa gaattccttt    240
agctcatttt catcaatatc atgtggcaag ttaccaacaa aaagttgatg actatctgga     300
tagcgaatta ttctacggtt gtcagagtca ttctgttcca tatctcctct gcctggtctt     360
ggtcctctag gaggaaaacc aggtcgttct ctaggtcgtt gttcacgcac acgaggtggc     420
tgagattgaa cttctggttt agcttcgact cttggctttg gtggttcttg tggcagagaa     480
acaggttctg ccggaggagg agtagtagat ttctcctcta gttcttctaa gttcttctcc     540
tccacttgtg gtttcagctc ttcagtcttt gtttcagatt ctggctcagg ttcaggttca     600
tgagaggatt cttccaaagg ctcctctatg ccattagtca cagggtgagc ttcatagtaa     660
ccactgttag cattttcttg cacaggttca ggagatggtt gnctttcttc ttggtcctct     720
```

tctacttcat cttctgattc ttcatcaaag ttcangctca gaatcaccaa acacttnatc 780
ttcataacga aacatatcat tgtgaacata aaatttattt gg 822

<210> 246
<211> 482
<212> DNA
<213> Homo Sapien

<400> 246
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt acttttttt ttttttttt 120
aaccaactca atatgtgttt gatgatagtg aattgataaa acccgaagct tttccctgta 180
aatcttacat ctttgccttt aaagaatggg ttacaaccat cactagatca cagtagtgcc 240
taatgaaggt tgagaaccgt aggagaggct ctcatgctgt aaataatgtt gcaggctaat 300
aacctttcat cacttccttt gtgcgcttcc tgccttaagt gacaagtagc aacatggctt 360
gggtcccctg tgcagcatca gcttatgctg ccacaagtca gtttgcaccc taggtgccca 420
ggagctagta tccttagatc tttctatcgc taacttaatt ctcttcgtta tttatctgac 480
cc 482

<210> 247
<211> 816
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

<400> 247
gggccttnga gctgctcgan cggccgccat gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt actttaattt tgcttgttca aatgatctac acttacattt 120
tgcaaatctt ttttttaaat tttttaaatt ttatattttt tttccagcca actcaaggcc 180
aaaaaaaatt tcttaatata gttattatgc gaggggaggg gaagcaaagg agcacaggta 240
gtccacagaa taagacacaa gaaacctcaa gctgtgaggt caatttgtaa ttaaaagaat 300
actaagatta gatgaacaca acactcagaa atactctagg agggctgaaa aagaaggaac 360
agatgttaac aaaacaaatt aaggctgctg gggaacctga gtccatgtta agcttgggtt 420
gactgtaaag aatttttttt tttttaatgc aagttagaca tggagttaga gggtcagata 480
aataacgaag agaattaagt tagcgataga aagatctaag gatactagct cctgggcacc 540
tagggtgcaa actgacttgt ggcagcataa gctgatgctg cacaggggac ccaagccatg 600
ttgctacttg tcacttaagg caggaagcgc acaaaggaag tgatgaaagg ttattagcct 660
gcaacattat ttacagcatg agagcctctc ctacgggtct caaccttcat taggcactac 720
tgngatctag tgatggttgt acccattctt taaaggcaaa gatgtaagat ttacagggaa 780
aagcttcggg ttttatcaat cctatcatca acacng 816

<210> 248
<211> 482
<212> DNA
<213> Homo Sapien

<400> 248
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtactctttg ggcattaatg 120
ccttctctgt aattatatct cgtttttgct tggcagtgac ctacccagta attgcatcgt 180
gtattgccat gaaaggtaaa cacattgtga actgaactta ccaagcagat tctgtgagaa 240
agcactggtt ggggctgaac actgttgaca catcattttt attggaagag tattaactgg 300
tgcctcttct gaaacacacc aacccatatt cctctgctcc cccaaagctg tttctgatcc 360
tgctgggagc aactaactag ttattatgca catctgctcc agacccagct ctttaacttc 420
atggttttac agcttgtttt ttctttttct tttcttttct ttttttttaa aaaagcacct 480
tt 482

<210> 249

<211> 821
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(821)
<223> n = A,T,C or G

<400> 249

```
ggcctctnag ctgctcgacg gccgccatgt gatggatatc tgcagaattc gcccttagcg      60
tggtcgcggc cgaggtactt tatgaatttg gggtaggtaa agtttgtatt ttatcttaaa     120
catgttttct atgatgaaaa ggaacaaaat tgtaaaaaat gaggatcttc cctctaaagg     180
tttcaaagcg ttagaggaca tgcaattaaa tgttgttaca ccttgaacaa tgagcctctt     240
gagtttgtag gaagggcaga ccggctccat taccaacaac tttggggtag aaagcacagc     300
tctcctcttt tacccagcac aaatgcaatc ctgattataa aactatttgt gtttctaaat     360
acaaccaaag gaaatcttag agaaacataa attagaaacc tcttttatta aggggaaaca     420
acaaaaaaag gtgctttttt aaaaaaaaag aaaagaaaag aaaaagaaaa aacaagctgt     480
aaaaccatga agttaaagag ctgggtctgg agcagatgtg cataataact agttagttgc     540
tcccagcagg atcagaaaca gctttggggg agcagaggaa tatgggttgg tgtgtttcag     600
aagaggcacc agttaatact cttccaataa aaatgatgtg tcaacagtgt tcagccccaa     660
ccagtgcttt ctcacagaat ctgcttggta agttcagttc acaatgtgtt tacctttcat     720
ggcaatacac gatgcaatta ctgggtaggt cactgccaag caaaaaccga agatntaatt     780
tcccgagaag gcattaatgc ccaaagagta cctgccccgg n                         821
```

<210> 250
<211> 481
<212> DNA
<213> Homo Sapien

<400> 250

```
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta caacattgat gttttaatat     120
agaatgaagt gcttgctaca cagtcaagta aatcaacata tccattacca cacacacttt     180
tcttttctga ggagcggtaa gagtacttta attttgcagt tattgattaa ttaaaaaaca     240
cagttgtttt cagcatttcc tagttacagt agtgcatagg aaattccatt ctaaacaaag     300
aagtaattaa tgaaataaca acacacctta acattttaca ttgataggtt acagtttaca     360
aggtgctttc acatacatta tttcatttga ttcttacaac aagcagaaaa aacagtggga     420
aagatttttt ttttcaggct tacaatgagt attttcaggc caatgggcag ttaacacaag     480
g                                                                     481
```

<210> 251
<211> 803
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(803)
<223> n = A,T,C or G

<400> 251

```
gggccttnna gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgccctttc      60
gagcggccgc ccggcaggta cactaaatta gaatattttt aaagtatgta acattcccag     120
tttcagccac aatttagcca agaataagat aaaaacttga ataagaagta agtagcataa     180
atcagtattt aacctaaaat tacatatttg aaacagaaga tattatgtta tgctcagtaa     240
ataattaaga gatggcattg tgtaagaagg agccctagac tgaaagtcaa gacatctgaa     300
tttcaggctg gaaaactatc agtatgatct cagcctcagt tctcttgtct gtaaaatgga     360
agaactggat taggcagttt gtaagattcc tcctaacttt cacagtcgat gacaagattg     420
tctttttatc tgatattttg aagggtatat tgctttgaag taagtctcaa taaggcaata     480
tattttaggg catctttctt cttatctctg acagtgttct taaaattatt tgaatatcat     540
aagagccttg gtgtctgtcc taattccttt ctcactcacc gatgctgaat acccagttga     600
```

atcaaactgt caacctacca aaaacgatat tgtggcttat gggtattgct gtctcattct 660
tggtatattc ttgtgttaac tgcccatggc ctgaaaatac tcattgtaag cctgaaaaaa 720
aaaatctttc ccactggttt ttctgcttgg tgtaagaatc aaatgaaata tggatgtgaa 780
agcccttgta actgtaccta tcn 803

<210> 252
<211> 500
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 252
tacnccaann tttgacctga ttacgccaag cttggtaccg agctcggatc cactagtaac 60
ggccgccagt gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac agatgaaaag 120
aagtggtgtt aatgacctac ctgcaccgat aataaagcaa atagaatgat tatatacatt 180
aagatcagct tgattaaaaa taaattttat atgcaggtaa attgatcatt aaaatgaacc 240
cagtttaact cttctcgtgt gttgttttaa ggtaggccac tgaaacgcag agataaaatc 300
anatggggaa aattaaaagc naagaaaaaa attacaaaac aagtgggtta agccatggat 360
tcttaaccaa accctggact aaatgtgcca aagtgctttg aaaatttcca ctgccagcna 420
tggntggtaa agtcantttg gcaaaaaaaa ggtggttnga aaaaaaactn accttttaaa 480
ttcccacctt ggatctggcn 500

<210> 253
<211> 831
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(831)
<223> n = A,T,C or G

<400> 253
gnnnnnnnnn gnnnnnnnnn ntttnnantg ggcctctnna gcatgctcga cggccgccat 60
gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt actatatttg 120
tgagcctagg gtaggggcac tgctgcaact tctgctttca tcccatgcct catcaatgag 180
gaaagggaac aaagtgtata aaactgccac aattgtattt taattttgag gtatgatatt 240
ttcagatatt tcataatttc taacctctgt tctctcagta aacagaatgt ctgatcgatc 300
atgcagatac aatgttggta tttgagaggt tagtttttt tcctacactt ttttttgcca 360
actgacttaa caacattgct gtcaggtgga aatttcaagc acttttgcac atttagttca 420
gtgtttgttg agaatccatg gcttaaccca cttgttttgc tattttttc tttgctttta 480
attttcccca tctgatttta tctctgcgtt tcagtggcct accttaaaac aacacacgag 540
aagagttaaa ctgggttcat tttaatgatc aatttacctg catataaaat ttatttttaa 600
tcaagctgat cttaatgtat ataatcattc tatttgcttt attatcggtg caggtaggtc 660
attaacacca cttcttttca tctgtacctc ggccgcgacc acgctaaggg cgaattccag 720
cacactggcg gcccgttact agtggatccg agctcggtac caagcttggc gtaatcatgg 780
gtcatagctg tttcctgtgt gaaattggta tccgntcaca attcccacan g 831

<210> 254
<211> 514
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(514)
<223> n = A,T,C or G

<400> 254
cacttgacnt gatcgccaac ttggtaccga cntcgnntcc attattaccg gacacttgac 60
tgatacgcca ncttggtacc gactcggacc actagtaacg gncgccagtg tgctggaatt 120
cgcccttgag cggccgcccg ggcaggtacc tctaatgcag gctaataaat ttaagctaat 180
tatttatgct acctgtgctg tggtggtttc ctatcagcag ccaaatataa cctcacagtt 240
gttttgctgt ttttgctttc acaaaagagc tattaaccaa cttaaaaatg tttttgatt 300
gaaggatgct taggggatga gaggatatca acaatataag cccatgccaa atccccattt 360
cttatcatta aaactgacct gacattaaag caatgcttaa ttttttacca taagagtgaa 420
attttgagat tataatttta aagtgtaaaa tatttacact taaattacac ttataatttt 480
aaagtgtata atatttacac agattaaaat aaaa 514

<210> 255
<211> 830
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(830)
<223> n = A,T,C or G

<400> 255
nnnnnngncn nnnnnnannn nnnnnnnant gggcctctnn agcntgctcg acggccgcca 60
tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta cttttttttt 120
ttttccagat gaagtcttgc tctgttgccc aggctggagc gcagtggcac aatctcagct 180
cactgaaacc ttcgccccct gggctcaagc tagccagtct tttagtaaac atttagtcaa 240
caaatctgca attataacgg aggtttgatt tttgttgttt ttgtttgttt ttaagtcact 300
ctgtgtttgt aatatcaatt tacttttcaa gtttagaatg ttttgcttca ttgtttccca 360
tattttattt taatctgtgt aaatattata cactttaaaa ttataagtgt aatttaagtg 420
taaatatttt acactttaaa attataatct caaaatttca ctcttatggt aaaaaattaa 480
gcattgcttt aatgtcaggt cagttttaat gataagaaat ggggatttgg catgggctta 540
tattgttgat atcctctcat cccctaagca tccttcaatc aaaaaacatt tttaagttgg 600
ttaatagctc ttttgtgaaa gcaaaaacag caaaacaact gtgaggttat atttggctgc 660
tgataggaaa ccaccacagc acaggtagca taaataatta gcttaaattt attagcctgc 720
attagaggta cctgcccggg cnggccgtca agggcgaatt ccagcacact ggcggccgtt 780
ctagtggatc cgactcggtc cagcttgcgt aatcatggtc atagctgttg 830

<210> 256
<211> 524
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(524)
<223> n = A,T,C or G

<400> 256
cnnnnnnnna ncntnanacn nnnnnntngn nnnnnagnnn nnnnnnnnnn nnnnnnnnan 60
actatgactg attacgccan cttggtaccg actcggatcc actagtaacg gccgccagtg 120
tgctggaatt cgcccttagc gtggtcgcgg ccgaggtaca ttacttggtg ttaacattgt 180
tggcagtggt agcccctttt cagaaagcaa cttgctgtaa gtcagggtgt ccgttccaac 240
cttcagccag tgaaaaggta gtaacaaatg gtaaacaaga gaatgattgt ttaaacctat 300
ctgtggacac ttaatgcaac tgtttaaaaa tgataatcac gagttatgta gcaacgtgga 360
aatatattta cagaacatta agtggagaaa gcaggacacg aaagtatatt tatactacag 420
ttataactca acagttcatt tatatgctgn tcatttaaca gttcatttaa acagttcatt 480
ataactgttt aaaaatatat atgcttatag tcaaaagctg ttgg 524

<210> 257
<211> 814
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(814)
<223> n = A,T,C or G

<400> 257
ntgggcctct agaagcatgc tcgagcggcc gccagtgtga tggatatctg cagaattcgc 60
ccttgagcgg ccgcccgggc aggtactttt tttttttttt tttttttttt tttgatattt 120
atttttaact ttatttttat tgntgacact attacagata gaatgaccac aaccatatta 180
acaaaccaaa aacctgtgca cagaaacaag atgaagaaaa tatatcaaga tgttaaccac 240
actctttgga tggtgaaaac atgggtgagt ttctcttcta catttctgta acttcaaagt 300
ttctataatg aacacatttc atatataatg gaaatatatg tagtaaaggt ggactaccaa 360
aacactagaa tgatgacctt tcaaggaaac cgaaacaaaa taaccataat cccacaacaa 420
ccacacaact atttcttgct tttcatcttt cttcccatct ttgacattta tgcatactta 480
tcactaacac cctaataatc acagactagt gcacagatca agatgttaac agttaattgt 540
tgttgggtgt tgggaatatg tgtgaatttt ctttactgaa tttccaaagt tttgtatgag 600
tatgtattat atttgtaatg gaaaatacat acataaaatt tattaccaaa acaccaaaga 660
ttatttaagg aatttgagac aaaatattta accaaattcc cacaatgaca acactatttt 720
agttattttc cacatctttt catttaaaga ctttatgcac acatatttaa cactgntatc 780
acaagcgtgt gcactgnaac aggattgagg aaan 814

<210> 258
<211> 474
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 258
acagctatga cctgattacg ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc cttagcgtgg tcgcggncga ngtacattat ttggaggact 120
taaaatctgn atgtggacat ggtcccaact tantgtccgt taactagtta tccaaattgt 180
aanagctaca gaaagcccag ttgaggggta antgtgcctg gntcacacag cctgcaccct 240
gtcacctcgg caatgagcca gtgtggggca ctggggactt ctaaccccttg gattgctctt 300
tttgacctgt gcataccttc taattgnaaa atatatttca gaccgagagt acntgcccgg 360
gcggccnctc aaaagggcga attctgcaaa tatccatcac atggcggccg ntngagcatg 420
catctaggag ggcncaattc ccctatagng agtngtatta caattcactg gcnc 474

<210> 259
<211> 809
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(809)
<223> n = A,T,C or G

<400> 259
ntgggcccnt agangcatgc tcgncggccg ccatgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtactcac ggtctgaaat atattttaca attagaaggt 120
atgcacaggt caaaaagagc aatccaaggg ttagaagtcc ccagtgcccc acactggctc 180
attgccgagg tgacagggtg caggctgtgt gagccaggca cacttacccc tcaactgggc 240
ttctgtagct ttacaatttg gataactagt tagcggacag tagttgggac atgtcacata 300
cagatttgag tcctccaata atgtacctcg gccgcgacca cgctaagggc gaattccagc 360
acactggcgg ccgttactag tggatccgag ctcggtacca agcttggcgt aatcatggtc 420
atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca tacgagccgg 480
aagcataaag tgtaaagcct ggggtgccta atgagtgagc taactcacat taattgcgtt 540

gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg 600
ccaacgcgcg gggagaggcg gtttgcgtat tgggcgctct tccgcttcct cgctcactga 660
ctcgctgcgc tcggtcgttc ggctgcggcg agcggtatca gctactcaaa ggcggtaata 720
ccgttatnca cagaatcang ggatacgcag gaaagaacat gtgagcaaaa ngccacaaaa 780
ggccaggaac cgtaaaaagg ccgcgtttg 809

<210> 260
<211> 713
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(713)
<223> n = A,T,C or G

<400> 260
ctctttaaac gccagctcga ntccganntc tatccntgac aannnnngtn ccggnctgga 60
attcgncctt tcgagcggcc gcccgggcag gtacttgagt tcatgggcat ctctcccgcc 120
gcctctcagc ctatctgcac catgtctcac acgttcagtt gcagctctta ccgttttgaa 180
ggcgcacgtg ggcaagaagt cctgggcagc acaagaaagt caatcacgtt gagacagaga 240
gagcaggaga ggaagtgggc cccagtagaa gtgggcgaga gagcgttggg tgggaacgtg 300
gcacgagaga gagaaattat gagattgaga gagagagaga gagagagaga gagagagaga 360
gaaagagana ganagaggga aaganaaaga gacagagaaa agaaactatt gttggttaaa 420
atgccagcgg aaagtccatg gggtgaatg agtccggcaa tggncangga gttagcagct 480
tggcgtagtg tctttcactg ntttggctgt cttgagaata gcattcnacn ccgactgtgg 540
ttccccanca gactttagnc ngttgcccng ncttgaattg ccggaccaag gttaacatag 600
gcttttcggn tctnaatatt tttggggctn gaatantcgg aaccntttgg gctgggccat 660
ttacccgntn cnncntgggt nnnacatttt tnctggntaa tcccgccttt tng 713

<210> 261
<211> 722
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(722)
<223> n = A,T,C or G

<400> 261
acgcanttag gtaccgagct cggatcccta gtaacggccg ccagtgtgct ggaattcgcc 60
cttagcgtgg tcgcggcccg aggtactcct cagccatgcc gaaggtcctc ttccgggact 120
cttcgatggc agacagcagg gcattgtcct tctcattctt caggaagccc tgcagctctt 180
aaatttaagg agttacagaa cggtcgatgc tgncgatcac tgcagctctt ccaaaccttc 240
ttatatgaga tgagctctgt cggaaccagt gctcaagttt ttcccacccc aaactgcctg 300
aattgaggga tgggggtggg gagaaggaca gagagaagag aaaaagagag aaagaagana 360
aaggaaaaga acaacccctc tgcaagtgct gatgtgactg aagcactaaa gagtcaaatt 420
aaacaatgaa gattgcaggg tccctttaaa aagggtgcac tgcagncccc ngagcacanc 480
natcccattc gnttgngccg ctncacanat tctagagaan tcnnccatca tgtttgaaan 540
gcncaaaant gatgggannt cccgnntacg cggggactta attctgcctt gggaaatcaa 600
ggaanacttt gnttggangc ggcanttnaa anntggcctt aagaangnng tgngaatttg 660
ttggccaaac nantngaaag gtnttccggc cgatnggtcc ctgattttta aggattnnaa 720
ng 722

<210> 262
<211> 705
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(705)
<223> n = A,T,C or G

<400> 262
acgctttaaa cnccagcttg gtaccgagct cggatcccta gtaacggccg ccagtgtgct 60
ggaattcgcc cttgccgccc gggcaggtac ctgatatttt gaacttttaa ttgctatcaa 120
atttcagctc tggttttatg cattgttgta atttctcagt gaatcccagt gcttctttcc 180
ttcttgaaaa atgccatttc gcccaggcgc ggtggctcat gcttgtaatc ccagcacttt 240
ggtaggccga ggtgggtgga tcagctgagg tctgtagttc aagaccagcc tggctaacat 300
gatgaaaccc tgtctctacc aaaaatacaa aaaaaaacta gccaggcatg gtgttgtatg 360
cctgtaatcc cagctactca ggaggctgag acaggagaat cgcttgaacc tgggaggtgg 420
aggttgcagt gagccaagat cgcgccactg cactncaacc tgggcaacag agtgagactc 480
catctcaaaa naannaaaaa ggaaaatgcc atttcttggg cccantgcca atatgcacca 540
agaatgttng taggaactac tttggtctgg ctgcagaagt tcttaatcta gcattaaaaa 600
tccaacggtt gatttgatct cttaaaatgg ttttcnnant ttgganctga aattgagnat 660
aaattacctt tgcnnntnaa ttcaaaangt tnaacctnnt tnann 705

<210> 263
<211> 656
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(656)
<223> n = A,T,C or G

<400> 263
acncgcttgt accgagctcg gatccctagt aacggccgcc agtgtgctgg aattcgccct 60
tagcgtggtc gcggcccgag gtaccgcggg ggagaacgcc agggagctgt gagagtgtgc 120
agtcgcgttc ctgctgtccg gacacttttt tcctctactg agactcatct ggtagatccg 180
caggccagtc ctcccagggg ctgaagttgt gaaatatggg ttttctaaga agattaatct 240
atcggcgtag accaatgatc tatgtagaat cttctgagga gtccagtgat gagcaacctg 300
acgaagtgga atcaccaact caaagtcagg attctacacc tgctgaagag agagaggatg 360
agggagcatc tgcagctcaa gggcaggagc ctgaagctga tagccaggaa ctggttcagc 420
caaagactgg gtgtgagctt ggagatggtc ctgataccaa gagggtntgc ctgcgaaatg 480
aagagcagat gaaactgccc gnagaaggcc agacctgann cgatagcagg acagttcccc 540
gaaactggtg tagcgcgaat gtctgtgtca gagtggcctg ccaatcaagg agtgaacccct 600
gggaataagc atccagctta aagannccct ganggttagt gtctngtgaa ttncct 656

<210> 264
<211> 752
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(752)
<223> n = A,T,C or G

<400> 264
ggnttgaang tatacgactc nctanggcga attgggccct ctagatgcat gctcgagcgg 60
cccgccagtg tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtacc 120
tttgataatt cctagacctc tattttcatt ctgtgtatta atgtgaataa cagatggata 180
ttttaatatt taaggcagat ggtaaacttt cctataggtc ttgtgagact tcgtcttata 240
ggctgaacac cattcacaaa atgtaataat gcttcattcc ttcaggttga ggtaaagaac 300
ttgagcaact ggattagcaa agctgcaaag aatgaaatgt ggcctaagat gtaattatgt 360
tctctgccct tcctttgggc cagggtagtt ttgcacttga cacaatggaa aataggccat 420
aaagcctgaa aataaaatgt tctaaacccc aatctcacag cactttagta ggcttttcac 480
taggcatctt taaagtattt tcaacaaaat actaattaag ctaccacttc aaaagagctt 540
caaggaaaag ctctgctttc ttataaaatc tttttgagac agagtttccg ctcttgtcag 600
cacaggctgg agtgcaatgg ccgtgatctc gactnaaccg naaccttcgg cctgctgggt 660

tcaagtgatt ctctagncct caagcttctg agtaggttgg gattacaggc gcccggncaa 720
ccacacctgg gctaaatttt ggatttctan gn 752

<210> 265
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

<400> 265
gngntttcnc nnngcgctct anagcatgct cgagcggccg ccagtgtgat ggatatctgc 60
agaattcgcc cttagcgtgg tcgcggccga ggtacctttg atnattccta gacctctatt 120
ttcattctgt gtattaatgt gaataacaga tggatattgt aatatttaag gcagatggta 180
aactttccta taggtcttgt gagactncnt cttataggct gaacaccatt nacnanntgt 240
antaatgctt nattccttca ggcngaggtn nanaacttga gcacctggat tagcagcagc 300
tgcgaagaat gaaatgcngc ctaacatgta attatgnatc tctgnccttc ctttgggcca 360
gggtagtnat gcnctagaca cantggatga tangccatna agcctgannn tgnaatgatc 420
taaacccnaa tctnncagca ctttattagg ctantcacta ggcatcttta agagtnggtt 480
cccnttaata ctagncaacc nnccactcca aaanancttc aagganaagc tntgntntnt 540
tanaaaatct tttcgnnaca cantttnacn cttggcgcnc angctggant gcaatggccg 600
tgatctctac tcacccgaan cctcngactg ctgagttcaa gtgattgtct gnccttanct 660
ctccgggacc angnttnggg attancaagc ctcgcgggca annacaggtg nctaattgnt 720
tgcattngcn taaaatnagg acaccng 747

<210> 266
<211> 738
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(738)
<223> n = A,T,C or G

<400> 266
cgnnnntgaa ggntacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgcccttt cgagcggccg cccgggcagg 120
tacagctgaa gtttgataac aaagaaatat atataagaca aaaatagaca agagttaaca 180
ataaaaacac aactatctgt tgacataaca tatggaaact ttttgtcaga aagctacatc 240
ttcttaatct gattgtccaa atcattaaaa tatggatgat tcagtgccat tttgccagaa 300
attcgtttgg ctggatcata gattaacatt ttcgagagca aatccaagcc attttcatcc 360
aagtttttga catgggatgc taggcttctg gtttccattt gggaaatgta ttcttatagt 420
cctgtaaaga ttccacttct ggccacactt cattattggg agtgcccaaa gctctgaaat 480
cctgaagagt tgatcaattc tgaatcccat ggaaaagtgg ttcttagtgc tagtcaacaa 540
atatnggngc ctatactcca aaggtcactt ggagttgagt natggagctg accccagcat 600
acttttggaa aactggacca agtggttgca ccaccnttaa aaaatttaaa accggnngta 660
ttttaaataa ggtggaagaa acctttttcct tttttattta aggaattcac ttagcnctta 720
ctaaattcat ggtggggg 738

<210> 267
<211> 731
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

<400> 267
gngnntttgn aagggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttcgag cggccgcccg ggcaggtaca gctgaagttt gataacaaag 120
aaatatatat aagacaaaaa tagacaagag ttaacaataa aaacacaact atctgttgac 180
ataacatatg gaaacttttt gtcagaaagc tacatcttct taatctgatt gtccaaatca 240
ttaaaatatg gatgattcag tgccatttg ccagaaattc gtttggctgg atcatagatt 300
aacattttcg agagcaaatc caagccattt tcatccaagt ttttgacatg ggatgctagg 360
cttcctggtt tccatttggg aaatgtattc ttatagtcct gtaaagattc cacttctggc 420
cacacttcat tattgggagt gcccaaagct ctgaaaatcc tgaagagttg atcaatttct 480
gaatccccat ggaaaagtgg tttcttagtt gctagttcag caaatatggt gcctatactc 540
caaatgtcaa ctggagttga gtaatgagct gaccccagca atacttctgg agatctgtca 600
agtggttgca acaccattaa aaaatataaa agcagtagtt atattaaaat aatgttgaag 660
aaaacatatn cctatatatt tnaaggaatt tcactaagca ctactaaatt tcatgttgtt 720
gggangngtt a 731

<210> 268
<211> 745
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 268
gnnnnnntaa agnanacntc actatanngc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgccctttg agcggccgcc cgggcaggta 120
cttcccacac aggtttgttg taaaaattaa gtgagctaat gtgtataaaa tacttcagtg 180
ctgaataaat gttggctttt attatatatt gttaaaaaac aacacaggct gggtatgata 240
gctcacgcct ataatcctag catttaggga ggccaaggca ggaggattgc ttgagtccag 300
gggtttgaga ccagcctggg caacatagtg agaccctatc tctacaaaat aaaataaatt 360
agttgggcat ggtggcacat gcctgtagtc ccagctactc aggaggctga ggtgggagga 420
ttgcttgagc ccaggaggta gaggttgcag tgagctgtga tcacaccact gcactccagc 480
gtcggtgacg gagtgagaac ctatctcaaa caaacaaaca aaaaaaccca aaacaaacaa 540
aaaaatccag taaagacaga gattcctaaa attctacaat tctaaaaacc agtagggctc 600
actgaatata agagaggcaa gcaaaaaatt actccaatat tttgagtttg ggtaacctgg 660
aatatgggtc atttattgag taaatagtta ctgagtccta actatgtgcc acacactggg 720
ttaacacttg gcactgtctc ttatg 745

<210> 269
<211> 730
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(730)
<223> n = A,T,C or G

<400> 269
gntnnnnttt tnaanccggt cctnntgcat gctcgagcgg cccgccagtg tgatggatat 60
ctgcagaatt cgccctttga gcggccgccc gggcaggtac ttcccacaca ggtttgttgt 120
aaaaattaag tgagctaatg tgtataaaat acttcagtgc tgaataaatg ttggctttta 180
ttatatattg ttaaaaaaca acacaggctg ggtatgatag ctcacgccta taatcctagc 240
atttagggag gccaaggcag gaggattgct tgagtccagg ggtttgagac cagcctgggc 300
aacatagtga gaccctatct ctacaaaata aaataaatta gttgggcatg gtggcacatg 360
cctgtagtcc cagctactca ggaggctgag gtgggaggat tgcttgagcc caggaggtag 420
aggttgcagt gagctgtgat cacaccactg cactccagcg tcggtgacgg agtgagaacc 480
tatctcaaac aaacaaacaa aaaaacccaa aacaaacaaa aaaatccagt aaagacagag 540
attcctaaaa ttctacaatt ctaaaaacca gtagggctca ctgaatataa gagaggcaag 600

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caaaaaatta ctccaatatt ttgagtttgg gtaacctgga atatggtcat tattgagtna     660
atagttactg agtcctacta tgtgcccaca ctgggtnaac acttgcactg tctcttatga     720
aatcttccan                                                             730

      <210> 270
      <211> 713
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(713)
      <223> n = A,T,C or G

      <400> 270
aattgggccc tctagatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt      60
cgccctttcg agcggccgcc cgggcaggta caaaccaata gctcctattc tggaaggttt     120
tctttttatt taaaaaaaat tcaaacaagg ttaaaagtca agcaagaagg gaagagagaa     180
actgggttct gagaaaaaaa tgtgccagta taaaataaac tcctaaatgc gtgcttgtca     240
tcctctagtt tttttttaa gttgaatttc ttttccactg taacttaaga tttgagattg      300
aggtttgcgg tccagaacat accctcagca gatacagtga ctaactggaa agtgcagttg     360
ttcaaggtct gtcatgctca atcacctaaa gctataattt gnttgatata ttaagcatgt     420
agacctagtg cagcatggga gccactcagg aagtttatgc aattaataaa ctttcagcat     480
aatttactat gaagtatgca gaatttcacc ctcttctcca cacttaacat ttagttgtat     540
atgtgaactc tcctttctta attggggaat gtagcattat atagaatgtt gntaaaggta     600
attttaatcc tttttgacat taaccttttt ttttttggn aaaccaagtg atctgccttt      660
cagcaactgg cttattttgg gtctttgaaa ctgngatttt tatttcattn gnc            713

      <210> 271
      <211> 702
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(702)
      <223> n = A,T,C or G

      <400> 271
gnctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc      60
cgggcaggta caaaccaata gctcctattc tggaaggttt tctttttatt taaaaaaaat     120
tcaaacaagg ttaaaagtca agcaagaagg gaagagagaa actgggttct gagaaaaaaa     180
tgtgccagta taaaataaac tcctaaatgc gtgcttgtca tcctctagtt tttttttaa      240
gttgaatttc ttttccactg taacttaaga tttgagattg aggtttgcgg tccagaacat     300
accctcagca gatacagtga ctaactggaa agtgcagttg ttcaaggtct gtcatgctca     360
atcaccctaa agctataatt tgtttgatat attaagcatg tagacctagt gcagcatggg     420
agccactcag gaagtttatg caattaataa actttcagca taatttacta tgaagtatgc     480
agaatttcac cctcttctcc acacttaaca tttagttgta tatgtgaact ctcctttctt     540
aattggggaa tgtncattat atagaatgtt ggtaaaggta attttaatcc tttttgacat     600
taaccttttt tttttttggg taaaccaagt gatctgnctt ttaacaactg gcttatttgg     660
gtcctttgna actgggaatt ttatttcatt tgnncctcgg cc                        702

      <210> 272
      <211> 736
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(736)
      <223> n = A,T,C or G
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<400> 272
gnnntttgan nnnnnnnnnn ntatagggcg aattgggccc tctagatgca tgctcgagcg 60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta 120
cttttttttta ttcctcagtt aaaacatgcc tgttattctt tttgtaatac ttaagcaatt 180
ttattttaaa gatatactac ttagttcatc cgtctccact tgtttttttt ttttgnnant 240
annggggttgg ttccnttaan nccacnggtt ttaaanccat nntngtcnnn ggnaaattan 300
nnttantnat taaanntnnn tnncntngca aanntccagn taaaatttta gtgggggggg 360
ggggttantt acnggnaann aattaantnc nggnnaatan tttaannntt ggnaangnac 420
nntngnnnta annattattt nnttnanntt tttaataann annaatttta ntttgnaacn 480
ntggtntttta ntaannggaa annccaatta attggttggt tgnattttttc ccagnaaccn 540
ntccntgggc nggaacnncc ntangggnaa nttcnagnnn ntngngggcn gtncnnaggg 600
nnnccaacnt nggcccancn tggnggaann nnnggcnnna nnggttcccn ggggnaaatg 660
gtattcngtt cnaatccnnc aanttccaac ccggagnctt aangggtaan nccngggggg 720
cntanngagn gcctaa 736

<210> 273
<211> 715
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(715)
<223> n = A,T,C or G

<400> 273
gngntttnac ganngnnnnn nnnnnctgct cgagcggccg ccagtgtgat ggatatctgc 60
agaattcgcc ctttcgagcg gccgcccggg caggtacttt tttttattcc tcagttaaaa 120
catgcctgtt attctttttg taatacttaa gcaattttat tttaaagata tactacttag 180
ttcatccgtc tccacttgtt tttttttttt gnnantanng ggttggttcc nttaanncna 240
cnggtnttaa anccannnnn gtcnnnggna aattannntt antcnntaaa nntnnnnnnc 300
ntggnaannn tccagntaaa atttnagtgg gggggggggg ttaattancg gnaannantt 360
aantnccgga naatantttta annnttggna angnacnttn gnnntaagna ttatttnntt 420
canntttttta atnantanna attttaattt gnaancntgg nntttannaa nnggaaannc 480
caattaattg gttggttgna tttttcccag naaccnnncc ntgggcngga acanccntaa 540
ggncaaatcn accaantgnc ggccgtacna aggggatcca acntnggccc ancctggnng 600
naataatggc cnaantggtt nccngggnna aatggnattc cgttcaaatt ccnccanntc 660
cnacccggag ccttaagngg taaacctggg ggcctaangg ggggcctaac tcaat 715

<210> 274
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 274
gnnnntnnan gnntacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
ccaggtgggc tgacgcacat cccctaaaca ttctggatct cttactcatc gtgaaaggca 180
gacgctctaa gtctaaagtc tagggtagga gtttccattc tttggaaaac caaagatggt 240
tactcttctt aatgaaactg agaagaaggt atctacagaa aacactgaat ttaaacaaat 300
tatgaccttg tttgttgaag ccatcaagga cccaagatat atcaaagaac aacatctctg 360
tattggccta caggttcaga gtgttttgag gtctgtttaa gcactaatag gattttaggc 420
cagcatccag tcagaagaga tagttcacag actcagagtt ggaaacagat taaaaaaaaa 480
aagatgtcaa catagaaaat gatgatagag tttagttaaa aaaattcaca cataaaatta 540
cagttaaaaa aattcacaca taaaatagag tgtttgcata gcaagacatt attgcccttc 600
agcctggcag aaaaacataa actcaggtgt atattttata ataaacattg nattgaatgc 660
taagaatgat acactggtga acatctnctg aatggttgcc ttcttgtaaa tcataccaat 720

tggttagaca attgaaattn ccagct 746

<210> 275
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 275
gnnnttaann ccttccctnt anatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtaccagg tgggctgacg cacatcccct 120
aaacattctg gatctcttac tcatcgtgaa aggcagacgc tctaagtcta aagtctaggg 180
taggagtttc cattctttgg aaaaccaaag atggttactc ttcttaatga aactgagaag 240
aaggtatcta cagaaaacac tgaatttaaa caaattatga ccttgtttgt tgaagccatc 300
aaggacccaa gatatatcaa agaacaacat ctctgtattg gcctacaggt tcagagtgtt 360
ttgaggtctg tttaagcact aataggattt taggccagca tccagtcaga agagatagtt 420
cacagactca gagttggaaa cagattaaaa aaaaaaagat gtcaacatag aaaatgatga 480
tagagtttag ttaaaaaaat tcacacataa aattacagtt aaaaaaattc acacataaaa 540
tagagtgttt gcatagcaag acattattgc ccttcagcct ggcagaaaaa cataaactca 600
ggtgtatatt ttataataaa cattgnattg aatgctaaga atgatcactg ttgaacatct 660
cctgaatggt ttgccttctt gtaaatcata ccaatggtta gacaattgaa attccagctc 720
tttct 725

<210> 276
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 276
nnnnntgann gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
cttctgctgt ggtaactcaa gtaaccctcc gtttaaacca ggacagacct atgctgacaa 180
ccatttttat cactcttagt ggtattttct ttctttgaac atgaatgcat atttctgctc 240
tttaatggcc tttggtattt aagattacat tcagctagtc tccttattgc atgttgtttt 300
attccagtcc caccagcact cagaacaaca gcaagtgtgt gtaacagcgg gcacaggcgc 360
tccagacgga aggacctcac tgacgcagtt agctcaggta gagcttattt ctgtgttcaa 420
ttttcttgtc atgagaagca gtgaccccta agaatttgta tccctttgtt cacttctttg 480
ttttaggaga gaaacttcta aagcattact ctaaaaggtg atagagacag agacgggcca 540
ttttcatcta ccccttgcag agttaagttt tattacagta agttgtgagg tgagacatga 600
tggctgcagg cacatagtca agatctaccc ttctaaggaa ataaaacggg gaaaagtggt 660
tgaatgtcca atatagaaaa tttaatcacc actttcccaa aaaagaataa atggaggact 720
ncattggaat tatggaaatg aaan 744

<210> 277
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 277
gnnnnttncg antgggccct ctagatgcat gctcgagcgg ccgccagtgt gatggatatc 60
tgcagaattc gcccttagcg tggtcgcggc cgaggtactt ctgctgtggt aactcaagta 120
accctccgtt taaaccagga cagacctatg ctgacaacca tttttatcac tcttagtggt 180
atttctttc tttgaacatg aatgcatatt tctgctcttt aatggccttt ggtatttaag 240
attacattca gctagtctcc ttattgcatg ttgttttatt ccagtcccac cagcactcag 300
aacaacagca agtgtgtgta acagcgggca caggcgctcc agacggaagg acctcactga 360
cgcagttagc tcaggtagag cttatttctg tgttcaattt tcttgtcatg agaagcagtg 420
acccctaaga atttgtatcc ctttgttcac ttctttgttt taggagagaa acttctaaag 480
cattactcta aaaggtgata gagacagaga cgggccattt tcatctaccc cttgcagagt 540
taagttttat tacagtaagt tgtgaggtga gacatgatgg ctgcaggcac atagtcaaga 600
tctacccttc taaggaaata aaacggggaa aagtggttga atgtccaata tagaaaattt 660
aatcaccact ttccaaaaaa gaataaatgg aggactncat tgtaattatg gaaatgaaat 720
ttgg 724

<210> 278
<211> 748
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(748)
<223> n = A,T,C or G

<400> 278
gnnnntgaaa gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacagctgc ccaagggcgt tcgtaacggg aatgccgaag cgtgtgaaaa agggagcggt 180
ggcggaagac ggggatgagc tcaggacaga gccagaggcc aagaagagta agacggccgc 240
aaagaaaaat gacaaagagg cagcaggaga gggcccagcc ctgtatgagg accccccaga 300
tcagaaaacc tcacccagtg gcaaacctgc cacactcaag atctgctctt ggaatgtgga 360
tgggcttcga gcctggatta agaagaaagg attagattgg gtaaaggaag aagccccaga 420
tatactgtgc cttcaagaga ccaaatgttc agagaacaaa ctaccagctg aacttcagga 480
gctgcctgga ctctctcatc aatactggtc agctccttcg gacaaggaag ggtactagca 540
actaaccatg gttaaaaggt cttagtcaga attacaaaaa caaaacattt agagtaatac 600
ttatgaatac aagcataatt ggttcctcgc cttctacaaa taaccatctt gaaaatgata 660
aaagcaggtt tcaactgtgg tcttctctca ttgagaaggt gcagatacac atgggtgatc 720
tactgattta ccttcttgaa agtnctcg 748

<210> 279
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 279
gnnnnttcga ntgggccctc tngngcatgc tcgagcggca cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtaca gctgcccaag ggcgttcgta 120
acgggaatgc cgaagcgtgt gaaaaaggga gcggtggcgg aagacgggga tgagctcagg 180
acagagccag aggccaagaa gagtaagacg gccgcaaaga aaaatgacaa agaggcagca 240
ggagagggcc cagccctgta tgaggacccc ccagatcaga aaacctcacc cagtggcaaa 300
cctgccacac tcaagatctg ctcttggaat gtggatgggc ttcgagcctg gattaagaag 360
aaaggattag attgggtaaa ggaagaagcc ccagatatac tgtgccttca agagaccaaa 420
tgttcagaga acaaactacc agctgaactt caggagctgc ctggactctc tcatcaatac 480
tggtcagctc cttcggacaa ggaagggtac tagcaactaa ccatggttaa aaggtcttag 540
tcagaattac aaaaacaaaa catttagagt aatacttatg aatcaagcat aattggttcc 600
tcgccttcta caaataccat ctttgaaaat gatnaaaagc aggtttcaac tgtggttctt 660

ctctcanttg aaaaggtcag atcccatggg tgatctactg atttaccttc tgaaaagtac 720
ttggccg 727

<210> 280
<211> 751
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(751)
<223> n = A,T,C or G

<400> 280
gnnnntgann gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
ctcatgtatt tttttttttt tccagatctc tttccccaag ttgctattgt aagagtattc 180
tgctgcgtgt ggatgcagtt atacacatta aagcagatct ggagtctgaa gtagctataa 240
agcagctata aaacagaaat acatgcatag ctgcagaaac catgataggt agaggacttt 300
tcttttggtt ttgttttgtt ttgttttgtt ttgtttttgg ttttacagag aagagatttt 360
tattacaaag aaaaaaattc cagtgaattg tgcagaaatg ctggttttta caccatccta 420
aagaaaaact ttacaagggt gttttggagt agaaaaaagg ttataaagtt ggaatcttaa 480
attgtaaaat taaccattga gtgtcaaagt tctaaaagca gaactcattt tgtgcaatga 540
acataaggaa agactactgn ataggttttt tttttctcct tttaaatgaa gaaaagcttt 600
gcttaagggt tgcatacttt tattggagta aatctgaatg atcctactcc tttggagtaa 660
aactagtgct taccagtttc caattggatt taacttctgg ggtggaattt ggaaaaaaaa 720
agaannnngg aaaaagaaaa cctaanttaa n 751

<210> 281
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 281
gnnnttcgan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtactcat gtattttttt ttttttccag 120
atctctttcc ccaagttgct attgtaagag tattctgctg cgtgtggatg cagttataca 180
cattaaagca gatctggagt ctgaagtagc tataaagcag ctataaaaca gaaatacatg 240
catagctgca gaaaccatga taggtagagg acttttcttt tggttttgtt ttgttttgtt 300
ttgttttgtt tttggtttta cagagaagag atttttatta caaagaaaaa aattccagtg 360
aattgtgcag aaatgctggt ttttacacca tcctaaagaa aaactttaca agggtgtttt 420
ggagtagaaa aaaggttata aagttggaat cttaaattgt aaaattaacc attgagtgtc 480
aaagttctaa aagcagaact cattttgtgc aatgaacata aggaaagact actgnatagg 540
tttttttttt ctccttttaa atgaagaaaa gctttgctta agggttgcat acttttattg 600
gagtaaatct gaatgatcct actcctttgg agtaaaacta gngcttccag tttccaattg 660
gatttaactt ctggntggaa tttgnaaaaa aaagaanaaa aggaaaanga aaccctaant 720
naaatag 727

<210> 282
<211> 749
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(749)
<223> n = A,T,C or G

<400> 282
tnnaaagnaa gctctttact cactatnngg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attctncctt cgagcggccg cccgggcagg 120
tacttttttt tttttttttt tttttttttt tttttnaaac tactaggatt tactgtagga 180
taaaagctnt acatggccct gcntacaaac tttctgcata cttctgcaaa tttttatgcn 240
ttactnaatc cattaaaaat caccttggaa naaactgcaa acncantana aactaaatga 300
natagtcaca gagaacanca aaaatagtaa ttnaagttcc catacaacat caagtgtgtn 360
cagtctattt tnggttcttc gggttctctt taaaattgaa ttgagtttgn atatgcatat 420
gtatgtagga gtggaggatg gaattaatta tcccaaacat cctacantca ctcctctaat 480
atttctttng ttaacatgca aatctgttct cttcattacg gngatactgc atttacatta 540
caacacantt agagatcatt aactttctcc tttataatca gccattttca caggcctttg 600
atatacaagc acctataata tattcttact catctcacac tttcatttac caaagtgtca 660
aaacaacatt tttacatcat tgatatttgg ttnantttct gcaanctggc tgttanaaaa 720
tgattacttc tnttaaatta ccttttanc 749

<210> 283
<211> 730
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(730)
<223> n = A,T,C or G

<400> 283
gtctntgaan cnggncctct ngatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttcgagcg gccgcccggg caggtacttt tttttttttt tttttttttt 120
tttttttttc aaactactag gatttactgt aggataaaag ctntacatgg ccctgcatac 180
aaactttntg catacttntg caaattttta tgcattactc aatccattaa aaatcacctt 240
ggaanaaact gcaaacncaa tagaaactaa atganatagt cacagagaac aacaaaaata 300
gtaatttaag ttcccataca acatcaagtg tgttcagtct atttttggtt cttcgggttc 360
tctttaaaat tgaattgagt ttgtatatgc atatgtatgt aggantggag gatggaatta 420
attatcccaa acatcctaca ctcactcctc taatatttct tttgttaaca tgcaaatctg 480
ttctcttcat tacggngata ctgcatttac attacaacac aattagagat cattaacttt 540
ctcctttata atcagccatt ttcacaggcc tttgatatac aagcacctat aatatattct 600
tactcatctt acactttcat ttaccaaagt gtcaaaaaca acatttttac atcattggat 660
atttggttta gtttctgcaa nctggctttt anaaaaatga ttacttctct taaattacct 720
tttaccctca 730

<210> 284
<211> 739
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(739)
<223> n = A,T,C or G

<400> 284
gnnntnaaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
aacataaagc aacagagagg tcttcatgtt tgggaagtgg ctgggcagga tgccaaaccc 180
caaatgactt attgagcaat ttctaaacca aacagagagg taggaaaaga ggatgggggt 240
caggggtgga ggctgtggaa aggggagagc gagggctgaa gagaatggca gccatacagg 300
tgttttgttt ttatttccac atctgaggac tgagagtctg atttgctgcc tgtccatttc 360
cgccactcat tgactgtcca tagttcatca tgccattggc tccatagaag ttcatcccag 420
ccatctgctg ggtcatctga gtaaggttcc attgcagctg ctgagctggc tggaccccat 480
acacagtctg gggcatagct gccatgcctg ccatgtagcc agcctgctgg gtggtcatca 540
ttccattcgg cacacccatc attgatgcct gcatgccacc catatagcct gcaggcatgg 600

ccatgggggc aaccatccca gaactnctgc tgagcaacca tgcctactgg tggaagcatc 660
atgcttccca ttatgctgtt angangtgta ccccngggaa actggggtag ctgtgggata 720
tccatctgan ccggaccat 739

<210> 285
<211> 721
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(721)
<223> n = A,T,C or G

<400> 285
gnnnttcgan tgggccctct ngatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggcac gaggtacaac ataaagcaac agagaggtct 120
tcatgtttgg gaagtggctg ggcaggatgc caaaccccaa atgacttatt gagcaatttc 180
taaaccaaac agagaggtag gaaaagagga tgggggtcag gggtggaggc tgtggaaagg 240
ggagagcgag ggctgaagag aatggcagcc atacaggtgt tttgttttta tttccacatc 300
tgaggactga gagtctgatt tgctgcctgt ccatttccgc cactcattga ctgtccatag 360
ttcatcatgc cattggctcc atagaagttc atcccagcca tctgctgggt catctgagta 420
aggttccatt gcagctgctg agctggctgg accccataca cagtctgggg catagctgcc 480
atgcctgcca tgtagccagc ctgctgggtg gtcatcattc cattcggcac acccatcatt 540
gatgcctgca tgccacccat atagcctgca ngcatggcca tgggggcaac catcccagaa 600
ctcctggctg agcaaccatg cctactggtg gangcatcat gcttcccatt atgctgttag 660
gangtgtacc ccggggaanc tggggtagct gtgggatatc catttaaccg gagccatgaa 720
c 721

<210> 286
<211> 757
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(757)
<223> n = A,T,C or G

<400> 286
gnnnnttaaa gnntacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggcccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gacgcggggg ttgcaccatg gcgtccatgg ggaccctcgc cttcgatgaa tatgggcgcc 180
ctttcctcat catcaaggat caggaccgca agtcccgtct tatgggactt gaggccctca 240
agtctcatat aatggcagca aaggctgtag caaatacaat gagaacatca cttggaccaa 300
atgggcttga taagatgatg gtggataagg atggggatgt gactgtaact aatgatgggg 360
ccaccatctt aagcatgatg gatgttgatc atcagattgc caagctgatg gtggaactgt 420
ccaagtctca ggatgatgaa attggagatg gaaccacagg agtggttgtc ctggctggtg 480
ccttgttaga agaagcggag caattgctag accgaggcat tcacccaatc agaatagccc 540
gatggctatg agcaggctgc tcgcgttgct attgaacacc tggacaagat cagcgatagc 600
gtccttgttg acataaagga caccgaaccc ctgattcaga cagcaaaaaa ccacgctggg 660
cttncaaaag tggtcaacag ttgtcaccga cagatggctt gaaaattgct gtgaaatgcc 720
cgtccttact gtaaccagat atngaaccgg aaaagac 757

<210> 287
<211> 726
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(726)

<223> n = A,T,C or G

<400> 287
gnnnnactga tttctggctc gaagttgnat ntgcggncgc cagtgtgatg gatatctgca 60
gaattcgccc tttcgagcgg ccgcccgggc aggacgcggg ggttgcacca tggcgtccat 120
ggggaccctc gccttcgatg aatatgggcg ccctttcctc atcatcaagg atcaggaccg 180
caagtcccgt cttatgggac ttgaggccct caagtctcat ataatggcag caaaggctgt 240
agcaaataca atgagaacat cacttggacc aaatgggctt gataagatga tggtggataa 300
ggatggggat gtgactgtaa ctaatgatgg ggccaccatc ttaagcatga tggatgttga 360
tcatcagatt gccaagctga tggtggaact gtccaagtct caggatgatg aaattggaga 420
tggaaccaca ggagtggttg tcctggctgg tgccttgtta gaagaagcgg agcaattgct 480
agaccgaggc attcacccaa tcagaatagc ccgatggcta tgagcaggct gctcgcgttg 540
ctattgaaca cctggacaag atcagcgata gcgtccttgn tgacataaag gacaccgaac 600
ccctgattca gacagcaaaa accacgctgg gctccaaaag tggtcaacag ttgtcaccga 660
cagatggctg aaaatgctgt gaatgccgtc ctnctgtanc agatatngaa ccggaaaaga 720
ccttga 726

<210> 288
<211> 743
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(743)
<223> n = A,T,C or G

<400> 288
gnnntganng tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgcccttcg gccgcccggg caggtacctt 120
ttacctaaaa ttctagccac tttaatttgg agagtttcca gagcaaaggg cacagatccc 180
aggcataaca acgctttgcg tatacagcaa ccaatatctt gtcaacccaa gaaagttcct 240
ccattgatac ctagtagaaa tagcccagtt tttaaagtcc tcaaaactgt aacaaattac 300
ttgtttttaa aatttaactt aaattaatac aatcagattt ttgtgttatt tgggtattag 360
agtatgttaa agcacatata tcccagagac atagagtttc cgtttcaaaa agtcatgcat 420
tcatgtgtgc taatgacaat cctatcctga cccgctatgt gacttgtatc tctaaaccat 480
aggctttcct gaattttatc tgttaattta accctgattt ctcagcagca gcttctcttt 540
gtaaatagac ttgcctcttc tgtgtctgac ctctgctcct cataatcaga ttaactcaga 600
taaagctgct tcagggaaga ggtcaaaacc gttgccaaaa atagtagttg ccctacttca 660
gtctattttc aacagagtag cccaggagat ctgtcacacc aaagtccaat cagccctact 720
ggtagcactc tgntcacaag ccn 743

<210> 289
<211> 726
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(726)
<223> n = A,T,C or G

<400> 289
gnnnnnactc gcagtccgtc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttcggcc gcccgggcag gtacctttta cctaaaattc tagccacttt 120
aatttggaga gtttccagag caaagggcac agatcccagg cataacaacg ctttgcgtat 180
acagcaacca atatcttgtc aacccaagaa agttcctcca ttgataccta gtagaaatag 240
cccagttttt aaagtcctca aaactgtaac aaattacttg tttttaaaat ttaacttaaa 300
ttaatacaat cagatttttg tgttatttgg gtattagagt atgttaaagc acatatatcc 360
cagagacata gagtttccgt ttcaaaaagt catgcattca tgtgtgctaa tgacaatcct 420
atcctgaccc gctatgtgac ttgtatctct aaaccatagg ctttcctgaa ttttatctgt 480
taatttaacc ctgatttctc agcagcagct tctctttgta aatagacttg cctcttctgt 540

gtctgacctc tgctcctcat aatcagatta actcagataa agctgcttca gggaagaggt 600
caaaaccgtt gccaaaaata gtagttgccc tacttcagtc tattttcaac agagtagcca 660
ggagatctgt tcacaccaaa gtccaatcag ccctactggt agcactctgc tcacaagcct 720
ncagtg 726

<210> 290
<211> 740
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

<400> 290
gnnnngaaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
ccagatgtct ttctcggtca ccttcccgag accatttaag acctccctag ctgctcgttc 180
tccagcctca actgcccctt ccatgtagcc gctccacttt gtggcagtct ctgtgcccgc 240
aaagaaaatc ctgcccacgg gttgacgaat caccсttcca tattgagtca tgatcccagg 300
agggaagtag gccgtgtagc agcccccaga gtacctgccc gggcggccgc tcgaaagggc 360
gaattccagc acactggcgg ccgttactag tggatccgag ctcggtacca agcttggcgt 420
aatcatggtc atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca 480
tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc taactcacat 540
taattgcgtt gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt 600
aatgaatcgg ccaacgcgcc ggggagaggc ggnttgcgta ttgggcgctc ttncgctttc 660
tngctcactg actcgctgcg ctcggtcgtt cggctgcggc nagcggtatc agctcattaa 720
angcggtaat acggtatccn 740

<210> 291
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 291
gnnnnnncna ntgggccctc tngngcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtacccag atgtctttct cggtcacctt 120
cccgagacca tttaagacct ccctagctgc tcgttctcca gcctcaactg ccccttccat 180
gtagccgctc cactttgtgg cagtctctgt gcccgcaaag aaaatcctgc ccacgggttg 240
acgaatcacc cttccatatt gagtcatgat cccaggaggg aagtaggccg tgtagcagcc 300
cccagagtac ctgcccgggc ggccgctcga aagggcgaat tccagcacac tggcggccgt 360
tactagtgga tccgagctcg gtaccaagct tggcgtaatc atggtcatag ctgtttcctg 420
tgtgaaattg ttatccgctc acaattccac acaacatacg agccggaagc ataaagtgta 480
aagcctgggg tgcctaatga gtgagctaac tcacattaat tgcgttgcgc tcactgcccg 540
ctttccagtc gggaaacctg tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga 600
gaggcggttt gcgtattggg cgctcttccg cttcctcgct cactgactcg ctgcgcttng 660
nccgtccggt tgcggcagcg gtataactna ctcaaaggcg gtaataccgg tatncacaga 720
atca 724

<210> 292
<211> 740
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(740)
<223> n = A,T,C or G

<400> 292
gnnnngnang tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggcccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
cagaaagaat caaagaacat atatatatat taagtttcat tccaacctac aaagagcctg 180
cacttaaaag tcttaaaggt ttcctgaatc atggaatctc aacttacctg ccaattaatc 240
cagttctctc tttttaaatg cagactccaa ccttaaacag aaggcatatt ctagctgact 300
tctaagtgtg tccaaagcat acctcagaga gccaagtggt ctgtgttcaa tacctattct 360
ttctatagaa tctcaaaagt ggcagtatga tgaaaagaaa agctactttt tctcctaaaa 420
atacccccct tcatcatcag tgtgttgtca tttttgcatc acaaagaata gacattctaa 480
atgttccctt ccacacagaa agacataaga gagaatgtga gtatgagtga gagtgtgtag 540
gtaagttgag ggatagtttg ctatccaaaa tgaatcattt tgaagatgac tttgtaaaga 600
agtaatatag ttaaaaatct caagacatga gattgangan ggcagggaaa taaaggacct 660
angaatggaa aagagttaca gcccatgtga atacatacac aaacctacca ggttatttct 720
gngaattctc acacaggttg 740

<210> 293
<211> 723
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(723)
<223> n = A,T,C or G

<400> 293
gnnnnnnncn annggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttagcgt ggtcgcggcc gaggtacaga aagaatcaaa gaacatatat 120
atatattaag tttcattcca acctacaaag agcctgcact taaaagtctt aaaggtttcc 180
tgaatcatgg aatctcaact tacctgccaa ttaatccagt tctctctttt taaatgcaga 240
ctccaacctt aaacagaagg catattctag ctgacttcta agtgtgtcca aagcatacct 300
cagagagcca agtggtctgt gttcaatacc tattctttct atagaatctc aaaagtggca 360
gtatgatgaa aagaaaagct actttttctc ctaaaaatac ccccttcat catcagtgtg 420
ttgtcatttt tgcatcacaa agaatagaca ttctaaatgt tcccttccac acagaaagac 480
ataagagaga atgtgagtat gagtgagagt gtgtaggtaa gttgagggat agtttgctat 540
ccaaaatgaa tcattttgaa gatgactttg taaagaagta atatagttaa aaatctcaag 600
agcatgagat tganganggc agggaaataa angcctagga atggaaaaga gttaacagcc 660
catgtgaata catagcacaa acctaccagg ttatttctgg gaatctnacc agtttgctgg 720
aaa 723

<210> 294
<211> 736
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(736)
<223> n = A,T,C or G

<400> 294
gnnnnnnnna gaccgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta 120
cctgggatta caggcaccca ccaccacgcc tggctaattt ttttttgtat ctttagtagg 180
gttttgccat gttggccagg ctggtcttta actcctacct cgtgatccac ccgcctcggc 240
cccccaaagt gctaggacca caggcgtgag ccaccacgcc cagccccctg tctcttttt 300
taaaacacaa tttaaaagca gaaagaaaaa atctgtgctg tttagactca gattcttaat 360
tagctagtat ttcttaattc aatcaataaa ttattaagac cttttcactg ctcccttttt 420
aaagtcttct ttggagtgat ttaagtgctt cttattacca agctctcaaa gagaagataa 480

```
aattaaaatc tgatgggtaa ccatttaaat aagacaactg gggtaaccca tttctccagg      540
acccctctct gcaacagaga gctattctct ttctttggcc tagtaaacct ctgctcttaa      600
cctttaaaaa aaaaaaaaaa gtacctcggc cgcgaccacg ctaanggcga attccagcac      660
actggcggcc gttactagtg gatccgaact cggtccaact tggcgtaatc atggcatagt      720
ggttcctgng tgaaan                                                      736
```

<210> 295
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 295

```
gnnnnnnnnn anngngccct ctagatgcat gctcgagcgg ccgccagtgt gatggatatc       60
tgcagaattc gccctttcga gcggccgccc gggcaggtac ctgggattac aggcacccac      120
caccacgcct ggctaatttt tttttgtatc tttagtaggg ttttgccatg ttggccaggc      180
tggtctttaa ctcctacctc gtgatccacc cgcctcggcc ccccaaagtg ctaggaccac      240
aggcgtgagc caccacgccc agccccctgt ctcttttttt aaaacacaat ttaaaagcag      300
aaagaaaaaa tctgtgctgt ttagactcag attcttaatt agctagtatt tcttaattca      360
atcaataaat tattaagacc ttttcactgc tccctttttta aagtcttctt tggagtgatt     420
taagtgcttc ttattaccaa gctctcaaag agaagataaa attaaaatct gatgggtaac      480
catttaaata agacaactgg ggtaacccat ttctccagga cccctctctg caacagagag      540
ctattctctt tctttggcct agtaaacctc tgctcttaac ctttaaaaaa aaaaaaaaag      600
tacctcggcc gcgaccacgc taagggcgaa ttccagcaca ctggcggccg ttactagtgg      660
atccgaactc ggtaccaagc ttgcgtaatc atggcatagc tggttcctgt gtgaaatggt      720
atccg                                                                  725
```

<210> 296
<211> 742
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(742)
<223> n = A,T,C or G

<400> 296

```
gnnnnnnnnn nnacaaanct gggtagggcg aattgggccc tctagatgca tgctcgagcg       60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta      120
ccatgctgac ttcttggtat cttttaaggc ctaattttcc cttccttgag attactgtag      180
tgtgttccag ctaatttcta tttggaaacg agttggaaca gctgaaaact aggtattatt      240
gaaggcaaag cagcctcacg tcagtttttt atcagctcat ttgggaagtt tttttttttt      300
tttttttttta attaattaga aagtaggctg ggcacggtgg ctcatgccta taatcccagc     360
acttggggag gccgaggatc tcctctctgg tggatcactt gagggcagga gttaagagac      420
catcctggcc aacatgatga aaccctgtct ctactaaaaa tacaaaaagt agctgggcgt      480
ggtggcatac tcttacaatc ccagctactt gggaggctga ggcaggagaa tcacttgaac      540
ctaggaagca gaggttgcag tgggccaaga tcacaccact atactctagc ctgggcgaca      600
gaagtgggga aaaaagtagg acccctgtcc tatattcang gttttctcac atatatgaac      660
ccatctaaat tctacgttgg taaaaggaac ctaaggttaa ttagnctata cttatttaag      720
aaccattntg gggnggagat gg                                               742
```

<210> 297
<211> 728
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(728)
<223> n = A,T,C or G

<400> 297
tnnnntttga anncnacnct ctagngcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtacc atgctgactt cttggtatct 120
tttaaggcct aattttccct tccttgagat tactgtagtg tgttccagct aatttctatt 180
tggaaacgag ttggaacagc tgaaaactag gtattattga aggcaaagca gcctcacgtc 240
agttttttat cagctcattt gggaagtttt tttttttttt tttttttaat taattagaaa 300
gtaggctggg cacggtggct catgcctata atcccagcac ttggggaggc cgaggatctc 360
ctctctggtg gatcacttga gggcaggagt taagagacca tcctggccaa catgatgaaa 420
ccctgtctct actaaaaata caaaaagtag ctgggcgtgg tggcatactc ttacaatccc 480
agctacttgg gaggctgagg caggagaatc acttgaacct aggaagcaga ggttgcagtg 540
ggccaagatc acaccactat actctagcct gggcgacaga agtggggaaa aaagtaggac 600
ccctgtccta tattcangtt tttctcacat atatgaaccc atctaaattc tacgttggta 660
aaggtanctt aagttaatta gnctatactt atttaaganc aatatggggt gaaaatggat 720
tttttttn 728

<210> 298
<211> 745
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 298
gnnnnnttna nnnnatacga ctcactatat agggcgaatt gggccctcta gatgcatgct 60
cgagcggccg ccagtgtgat ggatatctgc agaattcgcc cttagcgtgg tcgcggccga 120
ggtacccacg ttttgctcca cactccttga ccgcaggggc tcggacacaa acccctgtca 180
ccaggagagt cagtcagcac tacttgggag ggctaaaggg aaatttggaa ataaaattcc 240
aaagtttgga gtaaaaaaat tcaagtgttg attttatatt ctttcccttt ctgacacagc 300
ctaaagcgta gggggaacat gtgtttatct gtgggagata aacaagatgg agtcccaaag 360
actttaacaa aatatttttt taaaaatcca ctagaataga aaatacatta tttagatata 420
ctttatgctg agagtgagta tatatgcttg tcctatttaa acttgtgaga aaaagtggta 480
tcccttgata catttagaaa tatgggggct atcttgtttc attgtggggg tggggcagaa 540
ggagaataaa tgcaggatga ccctgttgaa ggaatcttag catggccaac aggggacgtt 600
tccagtcgat taccaggaaa tgcaagcctt ggggtttcta ctggtggtgg ggctgtcatg 660
aactttaaaa tccaaagcct agacaaggaa aagtgttaga ccaattgaaa agcaatccac 720
cctttttttt tttttttttt ggctt 745

<210> 299
<211> 733
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(733)
<223> n = A,T,C or G

<400> 299
gnnnnnnnnn nnnnnnncct ctagatgctg ctcgaacggc cgccagtgtg atggatatct 60
gcagaattcg cccttagcgt ggtcgcggcc gaggtaccca cgttttgctc cacactcctt 120
gaccgcaggg gctcggacac aaacccctgt caccaggaga gtcagtcagc actacttggg 180
agggctaaag ggaaatttgg aaataaaatt ccaaagtttg gagtaaaaaa attcaagtgt 240
tgattttata ttctttccct ttctgacaca gcctaaagcg tagggggaac atgtgtttat 300
ctgtgggaga taaacaagat ggagtcccaa agactttaac aaaatatttt tttaaaaatc 360
cactagaata gaaaatacat tatttagata tactttatgc tgagagtgag tatatatgct 420

```
tgtcctattt aaacttgtga gaaaaagtgg tatcccttga tacatttaga aatatggggg     480
ctatcttgtt tcattgtggg ggtggggcag aaggagaata aatgccagga tgaccctgtt     540
gaaggaatct tancatggcc aacaggggac gtttccagtc gattaccagg aaatgcaagc     600
cttggggttt ctactggtgg tggggctgtc atgaacnttt aaaatccaaa gcctagacca     660
aggaaaagtg ttaganccan tggaaaagcc attccagccc tttttttttn nnnnttttttg    720
gcttttcacc aca                                                        733
```

<210> 300
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 300

```
gnnnntgann gtatacgaac tcactatagg gcgaattggg ccctctagat gcatgctcga      60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag     120
gtacgtagtc taggccatat gtgttggaga ttgagactag tagggctagg cccaccgctg     180
cttcgcaggc ggcaaagact agtatggcaa taggcacaat attggctaag agggagtggg     240
tgttgagggt tatgagagta gctataatga acagcgatag tattattcct tctaggcaca     300
gtagggagga tatgaggtgt gagcgatata ctagtattcc tagaagtgag atggtaaatg     360
ctagtataat atttatgtaa atgaggggcc ccgcgtactc aagtgggtct ctgcctctca     420
gtggtggcct tggtcttcaa gtttcagcaa ttctgggaag ccaaggacac ctccatctcc     480
tcctccctga tctgcaactc atctaagagc agctttctca ctggaatgtc ttgtgtttaa     540
ggaacaagaa tccctgtttc cggtttgggt gcccaagtgc acctactgga tccaacccag     600
gattggagat actttgcaga acacaacatc atctggcaca tgaccagcca tggtgtttca     660
ctttcacaat ttcagcttnc ttcactgatt gcagcataat cgnggtcaac accttcaaga     720
ccaaggctga tgtgggccgc t                                               741
```

<210> 301
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 301

```
gnnnnntncn antgggccct ctngngcatn gctcgagcgg cacgccagtg tgatggatat      60
ctgcagaatt cgccctttcg agcggccgcc cgggcaggta cgtagtctag gccatatgtg     120
ttggagattg agactagtag ggctaggccc accgctgctt cgcaggcggc aaagactagt     180
atggcaatag gcacaatatt ggctaagagg gagtgggtgt tgagggttat gagagtagct     240
ataatgaaca gcgatagtat tattccttct aggcacagta gggaggatat gaggtgtgag     300
cgatatacta gtattcctag aagtgagatg gtaaatgcta gtataatatt tatgtaaatg     360
aggggccccg cgtactcaag tgggtctctg cctctcagtg gtggccttgg tcttcaagtt     420
tcagcaattc tgggaagcca aggacacctc catctcctcc tccctgatct gcaactcatc     480
taagagcagc tttctcactg gaatgtcttg tgtttaagga acaagaatcc ctgtttccgg     540
tttgggtgcc caagtgcacc tactggatcc aacccaggat tggagatact ttgcagaaca     600
caacatcatc tggcacatga ccagccatgg tgtttcactt tcacaatttc agcttncttc     660
actgattgca cataatcgtg gtcaacacct tcaagaccan ggctgatgtn ggccgntaca     720
ngga                                                                  724
```

<210> 302
<211> 745
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 302
gnnnntgaaa gtntanacga ctcactatag ggcgaattgg gccctctaga tgcatgctcg 60
agcggccgcc agtgtgatgg atatctgcag aattcgccct ttcgagcggc cgcccgggca 120
ggtactattc cggatataca agatcactgg gagatgttga tgatggagac acagtgacag 180
atttcatggc ccaagagcga gaaagaggca ttactattca atcagctgct gttacatttg 240
attggaaagg ttatagagtc aatctaattg atacaccagg tcatgtggac tttaccttgg 300
aggttgagcg gtgcctaaga gtgttggatg gtgcagtggc tgtatttgat gcctctgctg 360
gtgtagaggc ccagactctc acagtatgga ggcaagctga taaacacaat atacctcgaa 420
tctgtttttt aaacaagatg gacaaaactg gagcaagctt taagtatgca gttgaaagca 480
tcagagagaa gttaaaggca aagcctttgc ttttacagtt accaattggt gaagccaaaa 540
ctttcaaagg agtggtggat gtagtaatga aagaaaaact tctttggaat tgcaattcaa 600
atgatggaaa agactttgag agaaagcccc tcttggaaat gaatgatcct gaattgctga 660
aggaaacaac tgaagcaagg aatgccttaa ttgaacaagt tgcagaattt ggatgatgaa 720
ttgctgactt gggtttanaa naaat 745

<210> 303
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 303
gnnnttcgan tgggcccttc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtact attccggata tacaagatca 120
ctgggagatg ttgatgatgg agacacagtg acagatttca tggcccaaga gcgagaaaga 180
ggcattacta ttcaatcagc tgctgttaca tttgattgga aaggttatag agtcaatcta 240
attgatacac caggtcatgt ggactttacc ttggaggttg agcggtgcct aagagtgttg 300
gatggtgcag tggctgtatt tgatgcctct gctggtgtag aggcccagac tctcacagta 360
tggaggcaag ctgataaaca caatatacct cgaatctgtt ttttaaacaa gatggacaaa 420
actggagcaa gctttaagta tgcagttgaa agcatcagag agaagttaaa ggcaaagcct 480
ttgcttttac agttaccaat tggtgaagcc aaaactttca aaggagtggt ggatgtagta 540
atgaaagaaa aacttctttg gaattgcaat tcaaatgatg gaaaagactt tgagagaaag 600
cccctcttgg aaatgaatga tcctgaattg ctgaaggaaa caactgaagc aaggaatgcc 660
ttaattgaca agttgcagat ttggatgatg aatttgctga cttggtttta gaagaattan 720
tgag 724

<210> 304
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 304
gnnnnnngaa agtntacgac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt agcgtggtcg cggccgaggt 120
actttataaa tggaattttc ttctacttgt atccatttcc cggggcttat ggacccattc 180
atactctcca tatttagaat caaaggttcc tttctgaaga gaccttaatt ttaaggtaaa 240
acgtggtcca agttcctgaa ttcccacttt cttttcactc ctgaatatgt atctgtgaaa 300
tctgaagaat atgtaatccc gttgattgtg gaatgtggca acctgccttc cgataaattg 360

```
aggattatga ggaaagagag atgcaaacat acgtccaatt gaatgaccca gccgtgttgt     420
aaaattattc agaattattt caggtatgtg ttctgtgggg tccttgcctc ttctcttaat     480
ttctttacga agacgaacac tgctcatttt aaaatgagca gttgggccat ttggcaagtg     540
actcaaaata agtccatttg ggttttacg  atcttcatta ataacaatca ggtctgtgaa     600
atctcttgcg atgcactgtg gaataatttt tttcagaacc agcctcttct gtaataaaca     660
tgtgagtttg gtataactgt gganagctgt cacagagtcg taccagtata ccaaccatac     720
caactntgtt gtagagcaaa a                                               741
```

<210> 305
<211> 719
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(719)
<223> n = A,T,C or G

<400> 305

```
gnnnttncaa ntgggccctc tngatgcatg ctcgagcggc cgccagtgtg atggatatct      60
gcagaattcg cccttagcgt ggtcgcggcc gaggtacttt ataaatggaa ttttcttcta     120
cttgtatcca tttcccgggg cttatggacc cattcatact ctccatattt agaatcaaag     180
gttcctttct gaagagacct taattttaag gtaaaacgtg gtccaagttc ctgaattccc     240
actttctttt cactcctgaa tatgtatctg tgaaatctga agaatatgta atcccgttga     300
ttgtggaatg tggcaacctg ccttccgata aattgaggat tatgaggaaa gagagatgca     360
aacatacgtc caattgaatg acccagccgt gttgtaaaat tattcagaat tatttcaggt     420
atgtgttctg tggggtcctt gcctcttctc ttaatttctt tacgaagacg aacactgctc     480
attttaaaat gagcagttgg gccatttggc aagtgactca aaataagtcc atttggggtt     540
ttacgatctt cattaataac aatcaggtct gtgaaatctc ttgcgatgca ctgtggaata     600
attttttcag agccagtcct cttctgtaat aaacatgtga agtttggtat actgtggana     660
gctgtcacag agtcgacagt ataccaacca taccaactct gttgnagaac anaacccat      719
```

<210> 306
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 306

```
gnnnnntgaa agtatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga      60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag     120
gtactccagc ccaggcgaca gagtgagact cagtctcaaa aaaaaaaaaa atttgggcaa     180
gttatagtcc atctcatagt gttgttagga ctaatttctt catgtgctta gaaaaatgcc     240
tggcagatag gaaatggtca atattattat tattgataag atgaccattt tggagtttag     300
aaaaccattt tcaatgccta tgaaataaca actccataag ccattcccctt aaatccagta    360
gactgaattc tcacaagtcc tcatcactca tcatttctac atcctgctga tttacaaata     420
cttcttcata ccatggttta tgtctttgct taatatcaag gaggatggat tccatggtag     480
agccaaactc aatgatacta cgagtctcat tttggtaagt ataagcaaag ccagcagcat     540
gcatggccac caatgaacct tttgaatcaa acacagggga gcccggaagc cccaaagaaa     600
aattcagtgt cataggtaat cacatcangg ttgtgaacta ttttctggaa acttctttga     660
gtatacatat ggacatactc tggactttct gctttttttag actgaacacg ttcctgacat    720
ttctttgctc gctgaccctg anggat                                          746
```

<210> 307
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 307
gnnnnntncn antggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtact ccagcccagg cgacagagtg 120
agactcagtc tcaaaaaaaa aaaaaatttg ggcaagttat agtccatctc atagtgttgt 180
taggactaat ttcttcatgt gcttagaaaa atgcctggca gataggaaat ggtcaatatt 240
attattattg ataagatgac cattttggag tttagaaaac cattttcaat gcctatgaaa 300
taacaactcc ataagccatt cccttaaatc cagtagactg aattctcaca agtcctcatc 360
actcatcatt tctacatcct gctgatttac aaatacttct tcataccatg gtttatgtct 420
ttgcttaata tcaaggagga tggattccat ggtagagcca aactcaatga tactacgagt 480
ctcatttggg taagtataag caaagccagc agcatgcatg gccaccaatg aacctttga 540
atcaaacaca ggggagccgg aagccccaaa gaaaaattca gtgtcatagg taatcacatc 600
anggttgtga actattttct ggaaacttct ttgagtatac atatggacat actctggact 660
ttctgctttt ttagactgac acgttcctga catttctttg ctcgctgacc ctgagggatc 720
acang 725

<210> 308
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 308
gnnnntgaaa gtaatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacgcgggg tgacaagtag caacatggct tgggtcccct gtgcagcatc agcttatgct 180
gccacaagtc agtttgcacc ctaggtaccc aggagctagt atccttagat ctttctatcg 240
ctaacttaat tctcttcgtt atttatctga ccctctaact ccatgtctaa cttgcattaa 300
aaaaaaaaaa attctttaca gtcaacccaa gcttaacatg gactcaggtt ccccagcagc 360
cttaatttgt tttgttaaca tctgttcctt ctttttcagc tctcctagag tatttctgag 420
tgttgtgttc atctaatctt agtattcttt taattacaaa ttgacctcac agcttgaggt 480
ttcctgtgtc ttattctgtg gactacctgt gctcctttgc ttcccctccc ctcgcataat 540
aactatatta agaaattttt tttggccttg agttggctgg aaaaaaaata taaaatttaa 600
aaaaaaaaan nnnnnnnnaa aaaaaaaag tacctnggcc gggaccacgc taanggcgaa 660
ttccagcaca ctggcggccg ttactaagtg gatccgaact cggtaccaac ttggcgtaat 720
catggcatag ctggttcctg ngga 744

<210> 309
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 309
gnnnntncga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtacg cggggtgaca agtagcaaca 120
tggcttgggt cccctgtgca gcatcagctt atgctgccac aagtcagttt gcaccctagg 180
tacccaggag ctagtatcct tagatctttc tatcgctaac ttaattctct tcgttattta 240
tctgaccctc taactccatg tctaacttgc attaaaaaaa aaaaaattct ttacagtcaa 300
cccaagctta acatggactc aggttcccca gcagccttaa tttgttttgt taacatctgt 360

```
tccttctttt tcagctctcc tagagtattt ctgagtgttg tgttcatcta atcttagtat     420
tcttttaatt acaaattgac ctcacagctt gaggtttcct gtgtcttatt ctgtggacta     480
cctgtgctcc tttgcttccc ctcccctcgc ataataacta tattaagaaa tttttttttgg     540
ccttgagttg gctggaaaaa aaatataaaa tttaaaaaaa aaannnnnnn nnnnaaaaaa     600
aaaagtcctt ggccgggacc acnctaangg cgaaattcca gcacaactgg gcggnccgtt     660
actaagggga atcccnaact tnggnacccn aaacttgggc gtaaaacaat gggncaataa     720
gctggnnncc ctggnggtga aaaatt                                           746
```

<210> 310
<211> 751
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(751)
<223> n = A,T,C or G

<400> 310

```
gnnnntgana gtaatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga      60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag     120
gtacttaatg cctttctcct cctggacatc agagagaaca cctgggtatt ctggcagaag     180
tttatatttc tccaaatcaa tttctggaaa aaacgtgtca ctttcaaagt cttgcatgat     240
ccttgtcaca aatagtttaa gatggcctgg gtgattcatg gcttccttat aaacagaact     300
gccaccaact atccagacca tgtctacttt atttgctaat tctggttgtt cagtaagttt     360
taaggcatca tctagacttc tggaaagaaa atgagctcct tgtggaggtt ccttgagttc     420
tctgctgaga actaaattaa ttctaccctt taaaggtcga ttcttctcag gaatggagaa     480
ccaggtcttc ttacccataa tcaccagatt ctgnttacct tctactgaag aagttgtggt     540
cattctctgg aaatatctga attcattcct gagcggtggc caaggcangt ncccgttctt     600
gccgatgccc atgttctggg acacagcgac gatgcagttt agcgaaccaa ccatgacagc     660
aaccgggang accttcgagc cccgttcgnt acaagccccc gcgtaccttn gggccgngaa     720
cacgcttaag ggcgaattnc aacacactgg c                                     751
```

<210> 311
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 311

```
gnnttncnan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg      60
cagaattcgc cctttcgagc ggccgcccgg gcaggtactt aatgcctttc tcctcctgga     120
catcagagag aacacctggg tattctggca gaagtttata tttctccaaa tcaatttctg     180
gaaaaaacgt gtcactttca aagtcttgca tgatccttgt cacaaatagt ttaagatggc     240
ctgggtgatt catggcttcc ttataaacag aactgccacc aactatccag accatgtcta     300
ctttatttgc taattctggt tgttcagtaa gttttaaggc atcatctaga cttctggaaa     360
gaaaatgagc tccttgtgga ggttccttga gttctctgct gagaactaaa ttaattctac     420
cctttaaagg tcgattcttc tcaggaatgg agaaccaggt cttcttaccc ataatcacca     480
gattctgttt accttctact gaagaggttg tggtcattct ctggaaatat ctgaattcat     540
tcctgagcgg tggccaaggc angtccccgt tcttgccgat gcccatgttc tgggacacag     600
cgacgatgca gtttancgaa ccacccatga cagcagcggg aggaccttcg agcccgctcg     660
ttacaagccc ccgcgtacct tnggccgcga acaccttang gcgaaattca acacactggc     720
ggcc                                                                   724
```

<210> 312
<211> 738
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(738)
<223> n = A,T,C or G

<400> 312
nnnntttgaa gnctacnact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgcccttt gagcggccgc ccgggcaggt 120
acgcgggggg cagacatggc gacattgaca gtggtccagc cgctcaccct ggacagagat 180
gttgcaagag caattgaatt actggaaaaa ctacaggaat ctggagaagt acgttcacta 240
attatctaca aggacaaaat cagttgtatt tacaaaactc tacttcagtg tttgttttag 300
tttttttttt actgaaactt gtttttgtga atactctgtg cttagaatta aatatcactt 360
tcttatgaac aacataactt cttcagattg tgtatatgaa aacattagca agtcttgttt 420
tttctatgaa gcaaacacaa ttggtgacaa aggttgtcaa tcatttcttc aaaattataa 480
tgcagttcta atggtcagca tattttgata ttaaatttaa agatcacctc tctgcatttg 540
tttttaaatt atgctaatac accacacatt atgttggtat gttttggtct gtcctcggcc 600
gcgaccacgc ttanggcgaa ttccagcaca ctggcgggcc gttactagtg gatccgagct 660
cggtccaagc tggcgtaatc atggtcatag ctggttcctg tgtgaaatgg tatccgttac 720
aattcccaca catacgan 738

<210> 313
<211> 720
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(720)
<223> n = A,T,C or G

<400> 313
gnnttncaan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc cctttgagcg gccgcccggg caggtacgcg gggggcagac atggcgacat 120
tgacagtggt ccagccgctc accctggaca gagatgttgc aagagcaatt gaattactgg 180
aaaaactaca ggaatctgga gaagtacgtt cactaattat ctacaaggac aaaatcagtt 240
gtatttacaa aactctactt cagtgtttgt tttagttttt tttttactga aacttgtttt 300
tgtgaatact ctgtgcttag aattaaatat cactttctta tgaacaacat aacttcttca 360
gattgtgtat atgaaaacat tagcaagtct tgttttttct atgaagcaaa cacaattggt 420
gacaaaggtt gtcaatcatt tcttcaaaat tataatgcag ttctaatggt cagcatattt 480
tgatattaaa tttaaagatc acctctctgc atttgttttt aaattatgct aatacaccac 540
acattatgtt ggtatgtttt gntctgtacc tcggccgcga ccacgctaan ggcgaattca 600
ncacactggc ngncgttact agtggatccg agctcggacc aaacttggcg taatcatngn 660
catagctggt tcctgtgtga aaatggtatc cgttacaatt tcacacacat acgagccgga 720

<210> 314
<211> 740
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

<400> 314
gnnnnttnaa gnctacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
cttttttttt tttttttttt ttagtgcttt ctactttatt aaacatcaaa gcccaaatag 180
atgttccctg tggaggagga cttaaggaca ctaggggagg agaaagggac acctgggaag 240
agaatcacac cacagagacc aatcttcaca aaaagggtcc aatattgatt tctagggagg 300
agcagggcat ggtcagctca aatttggtga taacgtcagg atgaaggacc ccaagcttcc 360

```
cgacgctttg acccctggca aagatctctg cacatcgccc ggggaagaaa gcaggcccctt     420
ctgatgcttt gatcacatat cccccccttgt cttcaccagg aggcacatcg agcaactgca     480
taattctgtc cagcagccca tgaatgatct caaacccagg attcttgntg taataaacag     540
cactgagatg tctgtagttt tttgcaccta catctgnatt agaatctttt attacaatgt     600
cagagatttc aaacagtttc agtggaaggg gcatcttacg attgctgcta tggcttcagg     660
angccaggaa gaagggtagt gcgtgccacc tgaaattcac tggtttagga tacttatgtg     720
gactggcttt gttgcaaaan                                                 740
```

<210> 315
<211> 722
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(722)
<223> n = A,T,C or G

<400> 315

```
gnnnnnnnnn nnnnnnntnn atgctgctcg agcggccgcc agtgtgatgg atatctgcag      60
aattcgccct tagcgtggtc gcggccgagg tactttttttt tttttttttt ttttagtgct     120
ttctacttta ttaaacatca aagcccaaat agatgttccc tgtggaggag gacttaagga     180
cactagggga ggagaaaggg acacctggga agagaatcac accacagaga ccaatcttca     240
caaaaagggt ccaatattga tttctaggga ggagcagggc atggtcagct caaatttggt     300
gataacgtca ggatgaagga ccccaagctt cccgacgctt tgacccctgg caaagatctc     360
tgcacatcgc ccggggaaga aagcaggccc ttctgatgct ttgatcacat atcccccctt     420
gtcttcacca ggaggcacat cgagcaactg cataattctg tccagcagcc catgaatgat     480
ctcaaaccca ggattcttgt tgtaataaac agcactgaga tgtctgtagt tttttgcacc     540
tacatctgna ttagaatctt ttattacaat gtcagagatt tcaaacagtt tcagtggaaa     600
ggggcatctt acgatttgct gctatggnct tcangaggnc angaaaaagg gtantgcntg     660
cccctgaaat tcanctggtt taggattacc tatgtggact ggctttgntg caaaaaaatn     720
cn                                                                    722
```

<210> 316
<211> 753
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(753)
<223> n = A,T,C or G

<400> 316

```
gnnnnnttna nagtnnnnac gactcactat aggggcgaac nctctncatg catgctcnan      60
cggncnncan ngtgatggat atntgctgan ttcgccctta ccntngcntn ggccgaggcg     120
cagntcccac gtntngctcc ncactncnnn accgcagggg cncngacncn gaccngngnn     180
ncnnngngag tnccncagca ctacttggga nggctanagg gaagnttgga aataaaattc     240
caaannttgg agtaaaagca atncangcgn ngattatata tgntnncccct ttctgacacn     300
ncctagagcg tagggggaac atgngtntat ctgtgggana tnaacaagat ggagtcccaa     360
agactttaac aaagntattt cttaannatc cnctacaatn nanaatncat tattcatatn     420
tactntatgc tgnnagtgag tatntatgct ngtcctattt aaacttgnga gaanaagtgg     480
tntcccttga tacattnaga aatatggggg ctatcttgnt ncattgtggg ggtggggcan     540
aagganaatn aatgcangat gaccctgttg aangaatctt aacatggcca acanggggac     600
ngtttacagt cgattaccag gaaangcaag ccttggggtt tctactgcng gtgggggctg     660
tcatgaactt naaaatccan agnctatacc aggaaaaagt gttangaccc aattgaaang     720
ctntccaccc tttcttttnn tttgttccng cnc                                  753
```

<210> 317
<211> 893
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(893)
<223> n = A,T,C or G

<400> 317
gtgnnntntn cnaaatggnc cntttnaatg cctncctcga gcgggccgcc agtgtgatgg 60
atntntaatt cgnccttagc gtggtcgcgg ccgnngtacn aangaaataa aantnacagt 120
ntcaaagaac caaantaagt cggacacaaa cccctgtcac cannagagtc ccatanacat 180
aannnggntg ntgtcaagna ggattnaaat taactttaac aacnttntat ataatgctac 240
attccccaat taataaagga nagttcacat atacanctaa ntgntaattg tggaaanaag 300
ggtgaaantn tgcatantta atannaaana atgctgaang cttttncata nnattnnctt 360
aaaaatncac ttncnatgca gcantangtn tacatgctta atntatcntg cnagtgattn 420
ntatgcttgt cctacatgac ntaccttgaa caactggnac tncccagatt catactgaaa 480
tatggggncg ntaantatnt tgggancggn annacntgaa tcctcaaagg atannnnntn 540
tccagntgga tgaaaccnat nattnaaang gatatnntna accatnggan cgaatgnncg 600
nngntctttt tcaatnntnc gngaagntnc cnnttnnata ncccgngggc cncattgngg 660
ggnntatntn ncaatcaann ccnngagntg tntnntcntt cntcnaccgc ataacctttt 720
gccataggga accttntttn aaccccttg gnttatnggg aaanaannnn nntttaaat 780
tcnccaaaat ngggaaaaan aaccccttntc actctaaaaa nttanccnta gacctanttn 840
tngngncata tttgntaaac nctatggncc ctcnagnggg gnnctgggnc nnc 893

<210> 318
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 318
gnnnngattg tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt 120
acctcattag taattgtttt gttgtttcat ttttttctaa tgtctcccct ctaccagctc 180
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgctca 240
ttctctctga agtctaggtt acccatttttg gggacccatt ataggcaata aacacagttc 300
ccaaagcatt tggacagttt cttgttgtgt tttagaatgg ttttcctttt tcttagcctt 360
ttcctgcaaa aggctcactc agtcccttgc ttgctcagtg gactgggctc cccagggcct 420
aggctgcctt cttttccatg tcccacccat gagccctcca ctggacagct cagtaagcct 480
ggcccttcat tctgcgctgt gttcttcctc tgtgaaaatc caatacctct tacctcctct 540
gcatgcaaag attctcaagg attgtcagac ttcaaacgta acagcagaac caccagaagg 600
tcctataaat gcagtagtga ccttctcaag ctgtcanggc tttaaatagg atttgggatt 660
taatgctatg tatttttaaa ggaaagaaat aagagttgct agttttaaaa atgcatgtct 720
tttaccaatt canaatctgg cccc 744

<210> 319
<211> 720
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(720)
<223> n = A,T,C or G

<400> 319
gngtttaaac cttcttanng ctgctcgagc ggccgccagt gtgatggata tctgcagaat 60
tcgccctttc gagcggccgc ccgggcaggt acctcattag taattgtttt gttgtttcat 120
ttttttctaa tgtctcccct ctaccagctc acctgagata acagaatgaa aatggaagga 180

```
cagccagatt tctcctttgc tctctgctca ttctctctga agtctaggtt acccattttg      240
gggacccatt ataggcaata aacacagttc ccaaagcatt tggacagttt cttgttgtgt      300
tttagaatgg ttttcctttt tcttagcctt ttcctgcaaa aggctcactc agtcccttgc      360
ttgctcagtg gactgggctc cccagggcct aggctgcctt cttttccatg tcccacccat      420
gagccctcca ctggacagct cagtaagcct ggcccttcat tctgcgctgt gttcttcctc      480
tgtgaaaatc caatacctct tacctcctct gcatgcaaag attctcaagg attgtcagac      540
ttcaaacgta acagcagaac caccagaagg tcctataaat gcagtagtga ccttctcaag      600
ctgtcanggc tttaaatagg atttgggatt taatgctatg tatttttaaa ggaaagaaat      660
agagttgcta gttttaaaaa tgcatgtctt ttaaccaatt cagaatctgg ccccnaactt      720

      <210> 320
      <211> 694
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(694)
      <223> n = A,T,C or G

      <400> 320
atgctcgagc ggncggcant gtgatggatn tctgcagaat tcgccctttc gagcggccgc       60
ccgggcaggt actattccgg atatacaaga tcactgggag atgttgatga tggagacaca      120
gtgacagatt tcatggccca agagcgagaa agaggcntta ctattcaatc agctgctgtt      180
acatttgatt ggaaaggtta tagagtcaat ctaattgata caccaggtca tgtggacttt      240
accttggagg ttgagcggtg cctaagagtg ttggatggtg cantggctgt atttgatgcc      300
tctgctggtg tagaggccca gactntcaca gtatggaggc aagctgataa acacaatata      360
cctcgaatct gtttttaaa caagatggac aaaactggag caagctttaa gtatgcagtt      420
gaaagcatca gagagaagtt aaaggcaaag cctttgcttt tacagttacc aattggtgaa      480
gccaaaactt tcaaaggagt ggtggatgta gtaatgaang aaaaacttct ttgggaattg      540
caattcaana tgatggaaaa gactttgaga gaaagcccct cttggaaatg aatgatcctg      600
aattgctgaa ggaaacaact gaacaaggaa tgccttaatt gaacaaagtt gcagatttgg      660
atgatgaatt tgctgacttg gtttaagaa gaat                                    694

      <210> 321
      <211> 781
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(781)
      <223> n = A,T,C or G

      <400> 321
gngttnacna ntgggccctc tngatgctgc tcgagcggcc gncagtgtga tggatntctg       60
cagaatncgc cctncgggcg gccgnccggg caggtactat nccggatata caagatcact      120
gggagatgtt gatgatggag acncagngac agatttcatg gcccaagagc gagaaagagg      180
cnttactatn caatcagctg ctgttacatt cgattggaaa ggttatngag tcaatctaat      240
tgatncacca ngtnatgtgg actttacctt ggaggttgag cggtgcctaa nagtgttgga      300
tggtgcanng gctgtatttg atgcctctgc tggtgtagag gcccagactc tcacagtatg      360
gatgcaagct gataaacaca atatacctng aatctgtgtt ttaaacaaga tggacaaaac      420
tggagcaagc tttaaagtnt gcagttgaaa gcatcagaga gangttnaag gcanagcctt      480
tgcttttaca gtttcccaat tgggtgaaac ccaaaacttt tcaaagggag ttggttggat      540
tgtaagtaat gaaaggaaaa acttctttgg gaaantggca atttcaanat gattggaaaa      600
ngacttttgg gagaaaagcc ccttcttggg aaaatngaaa tgatncctga aatttgcngt      660
aaanngaaaa cnaacntgna atccaangga attncccttt aanttggaac aaaggnttgc      720
naanttttng attgaatnga atttgncnga cntttnggtt ttangaaaga aattaaagng      780
g                                                                       781

      <210> 322
      <211> 744
```

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 322
gnnntganag tatcgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gcccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt 120
acgcggggac tgggttttc tccttttgta gccttttcct ttagtctcct cttccccggtg 180
gttggtaaaa agaggtgaat tgacagccta tgttgaagac actgtgcttt tctcaagaag 240
gacatccaaa cagcaagtct acttctttct ctttaacgat gtgctcatta tcaccaagaa 300
gaagagtgaa gaaagttaca acgtcaatga ttattcctta agagatcagc tattggtgga 360
atcttgtgac aatgaagagc ttaattcttc tccagggaag aacagctcca caatgctcta 420
ttcaagacag agctctgcca gtcacctctt tactctgaca gtccttagta accacgcgaa 480
tgagaaagtg gagatgctac taggagctga gacgcagagc gagcgagccc gctggataac 540
tgccctggga cacagcagcg ggaagccgcc tgcagaccga acctnactga cccaggtgga 600
aatcgttagg tcatttactg ctaagcagcc agatgaactc ttcctgcagt ggctgacgtc 660
gtcctcatct atcaacgtgt cagcgatggc tggtatgaag gggaacgact tcgagatgga 720
gaaagaagnt gggttcctat ggaa 744

<210> 323
<211> 723
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(723)
<223> n = A,T,C or G

<400> 323
gtgtttcaan cggtcctcta gatgctgctc gagcggccgc cagtgtgatg gatatctgca 60
gaattcgccc tttcgagcgg ccgcccgggc aggtacgcgg ggactgggtt tttctccttt 120
tgtagccttt tcctttagtc tcctcttccc ggtggttggt aaaaagaggt gaattgacag 180
cctatgttga agacactgtg cttttctcaa gaaggacatc caaacagcaa gtctacttct 240
ttctctttaa cgatgtgctc attatcacca agaagaagag tgaagaaagt tacaacgtca 300
atgattattc cttaagagat cagctattgg tggaatcttg tgacaatgaa gagcttaatt 360
cttctccagg gaagaacagc tccacaatgc tctattcaag acagagctct gccagtcacc 420
tctttactct gacagtcctt agtaaccacg cgaatgagaa agtggagatg ctactaggag 480
ctgagacgca gagcgagcga gcccgctgga taactgccct gggacacagc agcgggaagc 540
cgctgcagac cgaacctcac tgacccaggt ggaaatcgtt aggtcattta ctgctaagca 600
gccagatgaa ctcttcctgc angtggctga cgtcgtcctc atctatcaac gtgtcancga 660
tggtggtatg aaggggaacg actacnagat ggagaaagaa gctggtttcc tatggaatgt 720
gcc 723

<210> 324
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 324
gggnttgaag ncncgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gcccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
cttgagatct gagcaactgt gttaatgaag taatagcaat ggtccacagt gaaagatgtg 180

```
ttggggtttg caaaacaagc attccgtcac ctctttaata atgtcacaga ctttttttaaa    240
agagaggcta tcaagttgta atataatctg tcatgtttta tttaggaagg aaggtaaatt    300
tgtgcttgca cggggatcat tttgtattat ttntgctaat acccagttga agctaaaaag    360
caactatttg aatcctgtga attaatttat aagaatgtta aacagctntg gaaatacatg    420
catcttatga atcatagcct tatttagcaa gatcaatgtt aaagtgttga tatatggcaa    480
gtatttaaca cattcacagt gntagtttga tttcaactgt gaattgtctt acagtttttt    540
caaacctagt gtntctatgg acacctgctc tgaattgtac ccctcagtca ccaccaaagc    600
atttncaccc ctttcaaccc ccaatcagac cantgctttc agtggtattg gaggacttnt    660
atcacagctt catnangtgg tcttggcaca ggcagnctga ctngcttngg aactggtgct    720
tttggactcc cttcaanngn aatant                                          746
```

<210> 325
<211> 742
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(742)
<223> n = A,T,C or G

<400> 325

```
gtgtttcann cggccctcta gatgcatgct cgagcggccc gccagtgtga tggatatctg     60
cagaattcgc ccttagcgtg gtcgcggccg aggtaccttg agatctgagc aactgtgtta    120
atgaagtaat agcaatggtc cacagtgaaa gatgtgttgg ggtttgcaaa acatgcattc    180
cgtcacctct ttaataatgt cacagacttt tttaanagag aggctatcaa gttgtnatat    240
aatctgtcat gtattattta agaaggaagg taaatntgtg cttgcacggg gatcattttg    300
nattattnct gctnataccc agctgaagct nanaancnac tntttgnatc ctgtgantta    360
atncatanna atgttanaca gctntggaaa tccatgcctc ttatgaatca tngccttatt    420
tancangatc aatgttaaag ntgttgatat nnggcaagtn tntaacacat tnacantgct    480
agtntgattt caactgngaa ttgncttacc gtntttnnaa acctananga atntatngac    540
acctnctctn aatngnnncc ctcaancacc acnaaanctt ttncnnccct tncaaccccc    600
natcngaccn cngcattcag tngnaancng aangactttc atcacaactg gncaanatnt    660
nggactttgg cgccatgcnn accctcttgg nctttngaac nnggttgcct tttnggactt    720
tncncctgng ngataaccac cn                                              742
```

<210> 326
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

<400> 326

```
atgntttaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc     60
ggccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt    120
actgtatcat tggcagatgt gacgtcaccg acaaccagag tgaagtggcg gacaaaactg    180
aggattacct gtggctgaag ttgaaccaag tgtgttttga cgacgatggc accagctccc    240
cacaagacag gctcactctc tcacagttcc agaagcagtt gttggaagac tatggcgagt    300
cccactttac ggtgaaccag caacccttcc tctacttcca agtcctgttc ctgacagcgc    360
agtttgaagc agcagttgcc tttcttttcc gcatggagcg gctgcgctgc catgctgtcc    420
atgtagcact ggtgctgttt gagctgaagc tgcttttaaa gtcctctgga cagagtgctc    480
aactcctcag ccacgaacct ggtgaccctt cttgcttgcg gcggctgaac ttcgtgcggc    540
tcctcatgct gtacctcggc cgngaccacg ctaagggcga attccagcac actggcggnc    600
gttactagtg gatccgagct cggtaccaaa cttggcgtaa tcatggncat agctggttcc    660
tgtgtgaaat ggtatccgtt acaatttcac acaacatacg agccgggaag catnaagtgt    720
naaacctggg gtgcctnatg agtgacn                                         747
```

<210> 327

<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 327
gtnatgaaac cnttctntng ngcatgctcg agcggccgcc agtgtgatgg atatctgcag 60
aattcgccct ttcgagcggc cgcccgggca ggtactgtat cattggcaga tgtgacgtca 120
ccgacaacca gagtgaagtg gcggacaaaa ctgaggatta cctgtggctg aagttgaacc 180
aagtgtgttt tgacgacgat ggcaccagct ccccacaaga caggctcact ctctcacagt 240
tccagaagca gttgttggaa gactatggcg agtcccactt tacggtgaac cagcaaccct 300
tcctctactt ccaagtcctg ttcctgacag cgcagtttga agcagcagtt gcctttcttt 360
tccgcatgga gcggctgcgc tgccatgctg tccatgtagc actggtgctg tttgagctga 420
agctgctttt aaagtcctct ggacagagtg ctcagctcct cagccacgag cctggtgacc 480
ctccttgctt gcggcggctg aacttcgtgc ggctcctcat gctgtacctc ggccgcgacc 540
acgctaaggg cgaattccag cacactggcg gccgttacta gtggatccga gctcggtacc 600
aagcttggcg taatcatggt catagctgtt tcctgtgtga aattgtatcc gctcacaatt 660
ncacacaaca tacgagccgg aagcataaag tgtaaaacct ggggtgccta atgagtgaac 720
taan 724

<210> 328
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

<400> 328
tgnntgttag atacgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
tttttttttt tttttaaag acagagtctt gctctgtcac ccaggctgga gtgcagtggc 180
acgatctcgg ctcactgcaa gctctgcctc ccgggttcac gccattctcc tgcctcagcc 240
tcccgagtag ctgggactac aggtgcccgc caccatgccc ggctgatttc tttttgtatt 300
tttagtagag acggagtttc accgtgttag ccaggatggt ctcgatctcc tgacctcgtg 360
atccgcccgc cttggcctcc aaagtgctgg gattacaggt gtgagctacc gcgcccggcc 420
tattatcttg tactttctaa ctgagccctc tattttcttt attttaataa tatttctccc 480
cacttgagaa tcacttgtta gttcttggta ggaattcagt tgggcaatga taacttttat 540
gggcaaaaac attctattat agtgaacaaa tgaaaataac agcgtatttt caatattttc 600
ttattcctta aattccactc ttttaacact atgcttaacc acttaatgtg atgaaatatt 660
cctaaaagtt aaatgactat taaagcatat attggtgcat gnatatatta aagtacccga 720
tactctaaat aaaaatccac tggtccn 747

<210> 329
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 329
gcgtttcaan tgggccctct ngngcatgct cgagcggccg ccagtgtgat ggatatctgc 60
agaattcgcc cttagcgtgg tcgcggccga ggtacttttt tttttttttt taaagacaga 120

```
gtcttgctct gtcacccagg ctggagtgca gtggcacgat ctcggctcac tgcaagctct     180
gcctcccggg ttcacgccat tctcctgcct cagcctcccg agtagctggg actacaggtg     240
cccgccacca tgcccggctg atttcttttt gtatttttag tagagacgga gtttcaccgt     300
gttagccagg atggtctcga tctcctgacc tcgtgatccg cccgccttgg cctccaaagt     360
gctgggatta caggtgtgag ctaccgcgcc cggcctatta tcttgtactt tctaactgag     420
ccctctattt tctttatttt aataatattt ctccccactt gagaatcact tgttagttct     480
tggtaggaat tcagttgggc aatgataact tttatgggca aaaacattct attatagtga     540
acaaatgaaa ataacagcgt attttcaata ttttcttatt ccttaaattc cactctttta     600
acactatgct taaccactta atgtgatgaa atattcctaa aagttaaatg actattaaag     660
catatattgg tgcatgtata tattaagtag cccgatctct naataaaaat ccactggtac     720
agata                                                                 725
```

<210> 330
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 330

```
gnnntganag atacgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg      60
gcccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac     120
tttttttttt tttttttttt tttttttttt ggaagtttaa tttactcaca gttcaacatg     180
gctggggagg cctcaggaaa tttacaatta taacagaagg caaaggggaa gccagatacc     240
ttcttcacaa ggtggcagga aggagaagag ccgagagaag gcggaagaat cccttataaa     300
accatcagat ctcgtgagaa ctcacttgct atcaggagaa cagcatgggg gaaccgcccc     360
caggattcaa tgacctncac ctggtctctc ccttgacacg tgaggattat ggggattaca     420
attccagatg agatttgggt ggggacacaa agccaaacca tatcaactgt gactaccttg     480
ggtaagggcc atccaggcag aggcaggggg aacattctgg gcaaaggcct tggggcaggg     540
gcctggtatg ttcagatagc ancaagtagg ccagantggc cggaggggag taagtgtggg     600
gaggccagtg ganagatgag ggtagggaag ggatggatca gatcatgcag ggccccgggg     660
gccacaggaa ngacctnagc atttactgca agtaangtgg gaaccatcga atgtctaagc     720
naggaggaat ccctgtgact c                                               741
```

<210> 331
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 331

```
gtnnnncgan ngggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg      60
cagaattcgc ccttagcgtg gtcgcggccg aggtactttt tttttttttt tttttttttt     120
ttttttggaa gtttaattta ctcacagttc aacatggctg gggaggcctc aggaaattta     180
caattataac agaaggcaaa ggggaagcca gataccttct tcacaaggtg gcaggaagga     240
gaagagccga gagaaggcgg aagaatccct tataaaacca tcagatctcg tgagaactca     300
cttgctatca ggagaacagc atgggggaac cgcccccagg attcaatgac ctccacctgg     360
tctctccctt gacacgtgag gattatgggg attacaattc cagatgagat ttgggtgggg     420
acacaaagcc aaaccatatc aactgtgact accttgggta agggccatcc aggcagaggc     480
agggggaaca ttctgggcaa aggccttggg gcaggggcct ggtatgttca gatagcagca     540
agtaggccag antggccgga ggggagtaag tgtggggagg ccagtggaaa aatganggta     600
gggaaaggga tggatcagat catgcagggc cccgggggcc acangaagga cctnacattt     660
actgcaagta angtgggagc catcgaatgt tctaagcana ngangaatcc ctgngactca     720
ngtgttn                                                               727
```

<210> 332
<211> 734
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(734)
<223> n = A,T,C or G

<400> 332
```
gnntganagt atacgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg     60
gcccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt    120
acccttctcg cttttgccat tagccaagga tagaagctgc agtggtatta atttgatat     180
aatctttcaa accagcttca tgtggcttcc cttttctttg ttcaagatga gggccaggag    240
gggaaacatc acacctgccc taaaccctgt tcctggaggt cagcatttga tctgttgcaa    300
gcccctcttt ctgtcccctc ttcctaccct gcctcccatg actttgctcc tcacactttt    360
ggaaccatgc cttccggggg ggcccatctc ttctggccgt ccttgtctct gggccacttg    420
gagtgtgtga taaatcagtc aagctgttga agtctcagga gtctctggta gcctgcagaa    480
gtaagcctca tcatcagagc ctttcctcaa aactggagtc ccaaatgtca tcaggttttg    540
nttttttttc aaccactaag aacccctctg cttttaactc tagaatttgg gcttggacca    600
gatctaacat cttgaatact ctgccctcta gaccttcacc ttaatggaan gtggatccca    660
nganggtgta atggacatca agccactcgc ggcagcatgg agctatacta agcatcctta    720
nggtctgcct ctcn                                                      734
```

<210> 333
<211> 710
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(710)
<223> n = A,T,C or G

<400> 333
```
ntgggccctc tngngctgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc     60
ctttcgagcg gccgcccggg caggtaccct tctcgctttt gccattagcc aaggatagaa    120
gctgcagtgg tattaatttt gatataatct ttcaaaccag cttcatgtgg cttccctttt    180
ctttgttcaa gatgagggcc aggaggggaa acatcacacc tgccctaaac cctgttcctg    240
gaggtcagca tttgatctgt tgcaagcccc tctttctgtc ccctcttcct accctgcctc    300
ccatgacttt gctcctcaca cttttggaac catgccttcc gggggggccc atctcttctg    360
gccgtccttg tctctgggcc acttggagtg tgtgataaat cagtcaagct gttgaagtct    420
caggagtctc tggtagcctg cagaagtaag cctcatcatc agagcctttc ctcaaaactg    480
gagtcccaaa tgtcatcagg ttttgttttt ttttcagcca ctaagaaccc ctctgctttt    540
aactctagaa tttgggcttg gaccagatct aacatcttga atactctgcc ctctagagcc    600
ttcagcctta atggaagggt ggatccaang anggtgtaat ggaacatcaa gccactcgcg    660
gcagcatgga gctatactaa gcatccttta nggtctgcct cttcagcatt               710
```

<210> 334
<211> 2051
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(2051)
<223> n = A,T,C or G

<400> 334
```
gcccttgcct cagcctaccc agtagctggt gatggccatc cttttataaa tgcaacgtcc     60
ttcgttcctg ttaagtcatg gggaggaag gcctttctc tcttcagtct aataatcaac     120
```

```
tgttcactat tcacaatagc aacatcatgg gctgaaccta tgtgtccatc aacagatgat    180
tagattttaa aatgtgcata tataccatgg aatacatacg caaccatcaa aaataatgaa    240
atcacatctt ttgcagcaat atggatggaa ctggaagccc ttatcgtaag tgaaatgact    300
cagagacaga aagtcagaaa ctgcatgttc tcatttggaa actgaaaatc acacacacat    360
aaatctaata aagacatggg tactttattt tcaaaacact catatgttgc aaaaaacaca    420
tagaaaaata aagtttggtg gggtgctgta ctaaacttca agtcacagac ttttatgtga    480
cagattggag cagggtttgt tatgcatgta gagaacccaa actaatttat taaacaggat    540
agaaacaggc tgtctgggtg aaatggttct gagaaccatc caattcacct gtcagatgct    600
gatagactag ctcttcagat gtttttctac cagttcagag atgggttaat gactagttcc    660
aatggggaaa aagcaagatg gattcacaaa ccaagtaatt ttaaacaaag acactttttt    720
tttttttgc aacacaatat acatcacagt gaaatgtgta atccttgcaa attgcaagtt    780
gaaagaatta aattcagagg aggggagaga aagagtactc agtagggact gagcactaaa    840
tgcttatttt aaaagaaatg taaagagcag aaagcaattc aggctaccct gccttttgtg    900
ctggctagta ctccggtcgg tgtcagcagc acgtggcatt gaacattgca atgtggagcc    960
caaaccacag aaaatggggt gaaattggcc aactttctat taacttatgt tggcaatttt   1020
gccaccaaca gtaagctggc ccttctaata aaagaaaatt gaaaggtttc tcactaaacg   1080
gaattaagta gtggagtcaa gagactccca ggcctcagcg tacctcatta gtaattgttt   1140
tgttgtttca tttttttcta atgtctcccc tctaccagct cacctgagat aacagaatga   1200
aaatggaagg acagccagat ttctcctttg ctctctgctc attctctctg aagtctaggt   1260
tacccatttt ggggacccat tataggcaat aaacacagtt cccaaagcat ttggacagtt   1320
tcttgttgtg ttttagaatg gttttccttt ttcttagcct tttcctgcaa aaggctcact   1380
cagtcccttg cttgctcagt ggactgggct ccccagggcc taggctgcct tcttttccat   1440
gtcccaccca tgagccctcc actggacagc tcagtaagcc tggcccttca ttctgcgctg   1500
tgttcttcct ctgtgaaaat ccaatacctc ttacctcctc tgcatgcaaa gattctcaag   1560
gattgtcaga cttcaaacgt aacagcagaa ccaccagaag gtcctataaa tgcagtagtg   1620
accttctcaa gctgtcaggt ctttaaatag gatttgggat ttaatgctat gtatttttaa   1680
aggaaagaaa taagagttgc tagtwttaaa aatgcatgtc ttttagccaa ttcagaatct   1740
gcccccaaac tttttttaaaa agtcaagaca gataaagctt tggggagacg gaaaaaaaaa   1800
aaaaaaaaaa aacaagtacc tcggccgcga ccacgctaag ggcgaattcc agcacactgg   1860
cggccgttac tagtgggttc nannccccggt acnaanccctt gggggtttaa caagggcnaa   1920
ancnggttnc cggggntnaa aattgttacc cgcnaaaaat tccanaaaaa natncgaacc   1980
cggaaancca taaanttntn aanccccnggn ggccnaaggg agngnnnaac cccnaataaa   2040
tggnttggnc c                                                          2051
```

<210> 335
<211> 1312
<212> DNA
<213> Homo sapien

<400> 335

```
acctagaaaa cagaaacttg agtagacatg gtaatgacca gaaaaggcta tctttataca     60
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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/12, C07K 14/47, C12Q 1/68, G01N 33/68, C07K 16/18, A61K 31/70 — A2

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(74) Agents: BAYNHAM, Robert, J.; Chiron Corporation, Intellectual Property-R338, P.O. Box 8097, Emeryville, CA 94662-8097 (US) et al.

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

(57) Abstract

This invention relates to novel human genes, to proteins expressed by the genes, and to variants of the proteins. The invention also relates to diagnostic and therapeutic agents related to the genes and proteins, including probes, antisense constructs, and antibodies. The invention further relates to polynucleotides differentially expressed in prostate cancer.

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
C12N 15/12, C07K 14/47, C12Q 1/68, G01N 33/68, C07K 16/18, A61K 31/70

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(54) Title: GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

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This invention relates to novel human genes, to proteins expressed by the genes, and to variants of the proteins. The invention also relates to diagnostic and therapeutic agents related to the genes and proteins, including probes, antisense constructs, and antibodies. The invention further relates to polynucleotides differentially expressed in prostate cancer.

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AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/13181

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12N15/12 C07K14/47 C12Q1/68 G01N33/68 C07K16/18
A61K31/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HILLIER, L. ET AL.: "WashU-NCI human EST project: zu71f08.s1 Soares testis NHT Homo sapiens cDNA clone 743463" EMBL DATABASE ENTRY AA609384, 1 October 1997 (1997-10-01), XP002128750 the whole document ---	1,2,7-9
A	HILLIER, L. ET AL.: "WashU-NCI human EST project 1997: zv83c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 760228" EMBL DATABASE ENTRY HS1226101; ACCESSION NUMBER AA425141 (VERSION 2), 28 October 1997 (1997-10-28), XP002128751 the whole document ---	1,2,7-9

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
26 January 2000	02.05.2000

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	ANDRES S.M.

1

Form PCT/ISA/210 (second sheet) (July 1992)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HILLIER, L. ET AL.: "WashU-NCI human EST project: za83e08.rl Soares fetal lung NbHL19W Homo sapiens cDNA clone 299174" EMBL DATABASE ENTRY HS287326; ACCESSION NUMBER W05287,8 May 1996 (1996-05-08), XP002128752 the whole document ---	1,2,7-9
A	WO 98 04689 A (UROCOR INC) 5 February 1998 (1998-02-05) page 4, line 8 -page 5 page 13 -page 52 page 66 -page 85 page 112 -page 122 ---	1-11
A	HELLER ET AL: "DISCOVERY AND ANALYSIS OF INFLAMMATORY DISEASE-RELATED GENES USING cDNA MICROARRAYS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 94, March 1997 (1997-03), pages 2150-2155, XP002100125 ISSN: 0027-8424 -----	

1

INTERNATIONAL SEARCH REPORT

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [X] Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210

2. [ ] Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. [ ] Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. [ ] As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. [X] No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11 (all partially)

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest.

[ ] No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 3.

Although claims 8 to 11 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Further defect(s) under Article 17(2)(a):

Continuation of Box 3.

Claims Nos.: 3 and 6

Present claims 3 and 6 relate to a nucleic acid sequences defined only by the (arbitrary) name of the clone they originate from. The use of these names in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is impossible to relate the clone names as given in claims 3 and 6 with the to be searched polynucleotide defined by SEQ ID 1. Consequently, no search has been carried out for claims 3 and 6 in the context of the first subject as mentionned on the communication pursuant to Art. 17(3)(a) PCT.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: Claims 1-11 (all partially)

A method for diagnosing or treating a prostate disorder by providing a probe, antisense, ribozyme capable of hybridizing to SEQ ID 1 or its complement, or an antibody capable of binding to a polypeptide encoded by SEQ ID 1.

Inventions 2 to 339: Claims 1,2,4,5,7-11 (all partially) and 3,6, 12-15 (all partially and as far as applicable)

As for subject 1. but respectively relating to SEQ IDs 2 to 339 (i.e. subject 2. corresponding to SEQ ID 2, subject 3. corresponding to SEQ ID 3,..., subject 339. corresponding to SEQ ID 339) and when applicable including the polynucleotide, vectors, cells and a composition containing the corresponding polypeptide.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Interna. ıl Application No
PCT/US 99/13181

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9804689 A	05-02-1998	AU 6642996 A	20-02-1998
		EP 0951541 A	27-10-1999
		US 5882864 A	16-03-1999

GENES AND GENE EXPRESSION PRODUCTS THAT ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

FIELD OF THE INVENTION

This invention relates to the area of diagnosis, prognosis, and treatment of cancer, tumor progression, hyperproliferative cell growth, and accompanying physical and biological manifestations. More specifically, the invention includes polynucleotides that are differentially regulated in prostatic disorders, such as metastatic prostate cancer, localized prostate cancer, and benign prostate hyperplasia (BPH).

BACKGROUND OF THE INVENTION

Genes that are up- or down-regulated in cancer or tumor progression are useful for therapeutic and diagnostic purposes. For example, detection of genes or gene expression products up-regulated in hyperproliferative cells can be a predictive or diagnostic marker of the onset or the progression of cancer. Early diagnosis can be useful if the cancer, tumors, or hyperproliferating cells can be inhibited, removed, or terminated to prevent metastasis or recurrence of cancerous growth. Such early warning is of particular use to prostate cancer patients, where removal of the growth, tumor, or cells is beneficial if the disease is confined to the prostate. There is a need in the art for genes related to cancer and tumor progression.

SUMMARY OF THE INVENTION

The present invention provides methods and reagents for diagnosing cancer, tumor progression, hyperproliferative cell growth, and accompanying biological and physical manifestations. Reagents for such diagnostic kits include:

(a) polynucleotides comprising a sequence capable of hybridizing to one or more of SEQ ID NO:1-339 or complement thereof;

(b) polypeptides comprising the amino acid sequence encoded by any one of SEQ ID NO:1-339; and

(c) antibodies capable of binding polypeptides comprising the amino acid sequence of (b).

The methods of diagnosis of the present invention include both nucleic acid assays and immunoassays.

In another embodiment, the present invention provides both compositions and methods for treating or ameliorating cancer, tumor progression, hyperproliferative cell growth, and accompanying biological and physical manifestations. The compositions for treatment or amelioration include:

(a) polynucleotides comprising the sequence capable of hybridizing to one or more of the sequences shown in SEQ ID NO:1-339 and complement thereof, including antisense, ribozyme and gene therapy nucleic acid constructs;

(b) polypeptides comprising the amino acid sequence encoded by any one of SEQ ID NO:1-339; and

(c) antibodies capable of binding polypeptides of polypeptides comprising the amino acid sequence (b).

Methods of treatment or amelioration include administering compositions of polynucleotides, polypeptides, antibodies, or combinations thereof and can be used

(a) to inhibit translation and/or transcription;

(b) to inhibit biological activity;

(c) as a vaccine antigen; and

(d) as an immune system inducer.

Such compositions can be administered systemically or locally to the desired site.

In one embodiment, the present invention provides a composition comprising an isolated polynucleotide selected from the group consisting of

(a) any one of SEQ ID NOs:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polynucleotide that encodes a variant of the polypeptide encoded by (a); and

(c) a polynucleotide encoding a protein expressed by a polynucleotide having the sequence of any one of the sequences of (a).

Preferably, the nucleic acid obtained from the biological material of part (b) above is genomic DNA or mRNA. The nucleic acid can also be cDNA complementary to the mRNA. .

Another embodiment of the invention is the use of the isolated polynucleotides or parts thereof as diagnostic probes or as primers.

In another embodiment, the present invention provides a composition comprising a polypeptide, wherein said polypeptide is selected from the group consisting of:

(a) a polypeptide encoded by any one of SEQ ID Nos:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polypeptide encoded by full-length mRNA or cDNA corresponding to any one of SEQ ID NO:1-339; and

(c) a variant of the protein (a) or (b);

In certain preferred embodiments, the polynucleotide is operably linked to an expression control sequence. The invention further provides a host cell, including bacterial, yeast, insect and mammalian cells, transformed with the polynucleotide sequence. The invention also provides the full-length cDNA and the full length human gene corresponding to the polynucleotide.

Protein and polypeptide compositions of the invention may further comprise a pharmaceutically acceptable carrier. Compositions comprising an antibody that specifically reacts with such protein or polypeptide are also provided by the present invention.

The invention further relates to a polypeptide or nucleic acid obtained by transforming a host cell with nucleic acid comprising at least one of SEQ ID NO:1-339, culturing the host cell, and recovering the replicated nucleic acid, the expressed RNA, and/or the expressed polypeptide.

Brief Description of the Figures

Figure 1 provides the open reading frame for clone SL 195.

Figure 2 provides the open reading frame for clone SL 197.

Figure 3 provides the immunohistochemistry staining results for clone SL 5 expression in a variety of normal and tumor tissues.

Detailed Description of the Invention

Genes that are up- or down-regulated in cancer or tumor progression are useful for therapeutic and diagnostic purposes. For example, a diagnostic assay to determine the stage of the disease also is useful in tailoring treatment of aggressive versus more mild cancer or tumor progression. The polynucleotide sequences and encoded polypeptides of the present invention are useful for these diagnostic or prognostic purposes.

Further, modulation of genes or gene expression products that are mis-regulated can be used to treat or ameliorate cancer, tumor progression, hyperproliferative cell growth, and the accompanying physical and biological manifestations. For example, the polynucleotide sequences provided herein as SEQ ID NO:1-339, can be used to construct the following polynucleotide and polypeptide compositions that are useful for treatment: antisense; ribozymes; antibodies; vaccine antigens; and immune system inducers, to induce dendritic cells, for example.

Identified herein are polynucleotide sequences that are upregulated in a cancer cell line, more specifically in a prostate cancer cell line. Thus, the present invention relates to methods and reagents for diagnosis, and to methods and compositions for treatment.

I. Use of Polynucleotides Having a Sequence of One or More of SEQ ID NO:1-339 to Obtain Full-Length cDNA and Full-Length Human Gene and Promoter Region

Full-length cDNA molecules comprising the disclosed sequences are obtained as follows. The polynucleotide or a portion thereof comprising at least 12, 15, 18, or 20 nucleotides is used as a hybridization probe to detect hybridizing members of a cDNA library using probe design methods, cloning methods, and clone selection techniques as described in U.S. Patent No. 5,654,173, "Secreted Proteins and Polynucleotides Encoding Them," incorporated herein by reference. Libraries of cDNA are made from selected tissues, such as normal or tumor tissue, or from tissues of a

mammal treated with, for example, a pharmaceutical agent. Preferably, the tissue is the same as that used to generate the polynucleotides, as both the polynucleotides and the cDNA represent expressed genes. Most preferably, the cDNA library is made from the biological material described herein in the Examples. Alternatively, many cDNA libraries are available commercially. (Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual, 2nd Ed.* (Cold Spring Harbor Press, Cold Spring Harbor, NY 1989).

Members of the library that are larger than the polynucleotide, and preferably that contain the whole sequence of the native message, are obtained. In order to confirm that the entire cDNA has been obtained, RNA protection experiments are performed as follows. Hybridization of a full-length cDNA to an mRNA will protect the RNA from RNase degradation. If the cDNA is not full length, then the portions of the mRNA that are not hybridized will be subject to RNase degradation. This is assayed, as is known in the art, by changes in electrophoretic mobility on polyacrylamide gels, or by detection of released monoribonucleotides. Sambrook *et al.*, *Molecular Cloning: A Laboratory Manual, 2nd Ed.* (Cold Spring Harbor Press, Cold Spring Harbor, NY 1989). In order to obtain additional sequences 5' to the end of a partial cDNA, 5' RACE (PCR Protocols: A Guide to Methods and Applications (Academic Press, Inc. 1990)) is performed.

Genomic DNA is isolated using polynucleotides in a manner similar to the isolation of full-length cDNAs. Briefly, the polynucldotides, or portions thereof, are used as probes to libraries of genomic DNA. Preferably, the library is obtained from the cell type that was used to generate the polynucleotides, but this is not essential. Most preferably, the genomic DNA is obtained from the biological material described herein in the Examples. Such libraries may be in vectors suitable for carrying large segments of a genome, such as P1 or YAC, as described in detail in Sambrook *et al.*, 9.4-9.30. In addition, genomic sequences can be isolated from human BAC libraries, which are commercially available from Research Genetics, Inc., Huntville, Alabama, USA, for example. In order to obtain additional 5' or 3' sequences, chromosome walking is performed, as described in Sambrook *et al.*, such that adjacent and

overlapping fragments of genomic DNA are isolated. These are mapped and pieced together, as is known in the art, using restriction digestion enzymes and DNA ligase.

Using the polynucleotides sequences of the invention, corresponding full length genes can be isolated using both classical and PCR methods to construct and probe cDNA libraries. Using either method, Northern blots, preferably, are performed on a number of cell types to determine which cell lines express the gene of interest at the highest rate.

Classical methods of constructing cDNA libraries are taught in Sambrook et al., supra. With these methods, cDNA can be produced from mRNA and inserted into viral or expression vectors. Typically, libraries of mRNA comprising poly(A) tails can be produced with poly(T) primers. Similarly, cDNA libraries can be produced using the instant sequences as primers.

PCR methods are used to amplify the members of a cDNA library that comprise the desired insert. In this case, the desired insert will contain sequence from the full length cDNA that corresponds to the instant ESTs. Such PCR methods include gene trapping and RACE methods. Gruber *et al.*, PCT WO 95/04745 and Gruber *et al.*, U.S. Pat. No. 5,500,356. Kits are commercially available to perform gene trapping experiments from, for example, Life Technologies, Gaithersburg, Maryland, USA. PCT Pub. No. WO 97/19110. (Apte and Siebert, *Biotechniques 15*:890-893, 1993; Edwards *et al., Nuc. Acids Res. 19*:5227-5232, 1991).

The promoter region of a gene generally is located 5' to the initiation site for RNA polymerase II, and can be obtained by performing 5' RACE using a primer from the coding region of the gene. Alternatively, the cDNA can be used as a probe for the genomic sequence, and the region 5' to the coding region is identified by "walking up." If the gene is highly expressed or differentially expressed, the promoter from the gene may be of use in a regulatory construct for a heterologous gene.

Once the full-length cDNA or gene is obtained, DNA encoding variants can be prepared by site-directed mutagenesis, described in detail in Sambrook *et al.*, 15.3-15.63. The choice of codon or nucleotide to be replaced can be based on disclosure herein on optional changes in amino acids to achieve altered protein structure and/or function.

As an alternative method to obtaining DNA or RNA from a biological material, nucleic acid comprising nucleotides having the sequence of one or more polynucleotides of the invention can be synthesized. Thus, the invention encompasses nucleic acid molecules ranging in length from 15 nucleotides (corresponding to at least 15 contiguous nucleotides of one of SEQ ID NO:1-339) up to a maximum length suitable for one or more biological manipulations, including replication and expression, of the nucleic acid molecule. The invention includes but is not limited to (a) nucleic acid having the size of a full gene, and comprising at least one of SEQ ID NO:1-339; (b) the nucleic acid of (a) also comprising at least one additional gene, operably linked to permit expression of a fusion protein; (c) an expression vector comprising (a) or (b); (d) a plasmid comprising (a) or (b) ; and (e) a recombinant viral particle comprising (a) or (b).

The sequence of a nucleic acid comprising at least 15 contiguous nucleotides of at least any one of SEQ ID NO:1-339, preferably the entire sequence of at least any one of SEQ ID NO:1-339, is not limited and can be any sequence of A, T, G, and/or C (for DNA) and A, U, G, and/or C (for RNA) or modified bases thereof, including inosine and pseudouridine. The choice of sequence will depend on the desired function and can be dictated by coding regions desired, the intron-like regions desired, and the regulatory regions desired.

Where the entire sequence of any one of SEQ ID NO:1-339 is within the nucleic acid, the nucleic acid obtained is referred to herein as a polynucleotide comprising the sequence of any one of SEQ ID NO:1-339.

II. Expression of Polypeptide Encoded by Full-Length cDNA or Full-Length Gene

The polynucleotide, the corresponding cDNA, or the full-length gene is used to express the partial or complete gene product. Appropriate polynucleotide constructs are purified using standard recombinant DNA techniques as described in, for example, Sambrook *et al.*, (1989) *Molecular Cloning: A Laboratory Manual*, 2nd ed. (Cold Spring Harbor Press, Cold Spring Harbor, New York). The polypeptides encoded by the polynucleotides are expressed in any expression system, including, for example,

bacterial, yeast, insect, amphibian and mammalian systems. Suitable vectors and host cells are described in U.S. Patent No. 5,654,173.

Bacteria. Expression systems in bacteria include those described in Chang *et al., Nature* (1978) *275*:615, Goeddel *et al., Nature* (1979) *281*:544, Goeddel *et al., Nucleic Acids Res.* (1980) *8*:4057; EP 0 036,776, U.S. Patent No. 4,551,433, DeBoer *et al., Proc. Natl. Acad. Sci. (USA)* (1983) *80*:21-25, and Siebenlist *et al., Cell* (1980) *20*:269.

Yeast. Expression systems in yeast include those described in Hinnen *et al., Proc. Natl. Acad. Sci. (USA)* (1978) *75*:1929; Ito *et al., J. Bacteriol.* (1983) *153*:163; Kurtz *et al., Mol. Cell. Biol.* (1986) *6*:142; Kunze *et al., J. Basic Microbiol.* (1985) *25*:141; Gleeson *et al., J. Gen. Microbiol.* (1986) *132*:3459, Roggenkamp *et al., Mol. Gen. Genet.* (1986) *202*:302) Das *et al., J. Bacteriol.* (1984) *158*:1165; De Louvencourt *et al., J. Bacteriol.* (1983) *154*:737, Van den Berg *et al., Bio/Technology* (1990) *8*:135; Kunze *et al., J. Basic Microbiol.* (1985) *25*:141; Cregg *et al., Mol. Cell. Biol.* (1985) *5*:3376, U.S. Patent Nos. 4,837,148 and 4,929,555; Beach and Nurse, *Nature* (1981) *300*:706; Davidow *et al., Curr. Genet.* (1985) *10*:380, Gaillardin *et al., Curr. Genet.* (1985) *10*:49, Ballance *et al., Biochem. Biophys. Res. Commun.* (1983) *112*:284-289; Tilburn *et al., Gene* (1983) *26*:205-221, Yelton *et al., Proc. Natl. Acad. Sci. (USA)* (1984) *81*:1470-1474, Kelly and Hynes, *EMBO J.* (1985) *4*:475479; EP 0 244,234, and WO 91/00357.

Insect Cells. Expression of heterologous genes in insects is accomplished as described in U.S. Patent No. 4,745,051, Friesen *et al.* (1986) "The Regulation of Baculovirus Gene Expression" in: The Molecular Biology Of Baculoviruses (W. Doerfler, ed.), EP 0 127,839, EP 0 155,476, and Vlak *et al.*, J. *Gen. Virol.* (1988) *69*:765-776, Miller *et al., Ann. Rev. Microbiol.* (1988) *42*:177, Carbonell *et al., Gene* (1988) *73*:409, Maeda *et al., Nature* (1985) *315*:592-594, Lebacq-Verheyden *et al., Mol. Cell. Biol.* (1988) *8*:3129; Smith *et al., Proc. Natl. Acad. Sci. (USA)* (1985) *82*:8404, Miyajima *et al., Gene* (1987) *58*:273; and Martin *et al., DNA* (1988) *7*:99. Numerous baculoviral strains and variants and corresponding permissive insect host cells from hosts are described in Luckow *et al., Bio/Technology*

(1988) *6*:47-55, Miller *et al.*, Generic Engineering (Setlow, J.K. *et al.* eds.), Vol. 8 (Plenum Publishing, 1986), pp. 277-279, and Maeda *et al.*, *Nature*, (1985) *315*:592-594.

Mammalian Cells. Mammalian expression is accomplished as described in Dijkema *et al.*, *EMBO J.* (1985) *4*:761, Gorman *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1982) *79*:6777, Boshart *et al.*, *Cell* (1985) *41*:521 and U.S. Patent No. 4,399,216. Other features of mammalian expression are facilitated as described in Ham and Wallace, *Meth. Enz.* (1979) *58*:44, Barnes and Sato, *Anal. Biochem.* (1980) *102*:255, U.S. Patent Nos. 4,767,704, 4,657,866, 4,927,762, 4,560,655, WO 90/103430, WO 87/00195, and U.S. RE 30,985.

Polynucleotide molecules comprising the polynucleotide sequence are propagated by placing the molecule in a vector. Viral and non-viral vectors are used, including plasmids. The choice of plasmid will depend on the type of cell in which propagation is desired and the purpose of propagation. Certain vectors are useful for amplifying and making large amounts of the desired DNA sequence. Other vectors are suitable for expression in cells in culture. Still other vectors are suitable for transfer and expression in cells in a whole animal or person. The choice of appropriate vector is well within the skill of the art. Many such vectors are available commercially. The polynucleotide is inserted into a vector typically by means of DNA ligase attachment to a cleaved restriction enzyme site in the vector. Alternatively, the desired nucleotide sequence may be inserted by homologous recombination in vivo. Typically this is accomplished by attaching regions of homology to the vector on the flanks of the desired nucleotide sequence. Regions of homology are added by ligation of oligonucleotides, or by polymerase chain reaction using primers comprising both the region of homology and a portion of the desired nucleotide sequence, for example.

Polynucleotides are linked to regulatory sequences as appropriate to obtain the desired expression properties. These may include promoters (attached either at the 5' end of the sense strand or at the 3' end of the antisense strand), enhancers, terminators, operators, repressors, and inducers. The promoters may be regulated or constitutive. In some situations it may be desirable to use conditionally active promoters, such as tissue-specific or developmental stage-specific promoters. These are

linked to the desired nucleotide sequence using the techniques described above for linkage to vectors. Any techniques known in the art may be used.

When any of the above host cells, or other appropriate host cells or organisms, are used to replicate and/or express the polynucleotides or nucleic acids of the invention, the resulting replicated nucleic acid, RNA, expressed protein or polypeptide, is within the scope of the invention as a product of the host cell or organism. The product is recovered by any appropriate means known in the art.

Once the gene corresponding to the polypeptide is identified, its expression can be regulated in the cell to which the gene is native. For example, an endogenous gene of a cell can be regulated by an exogenous regulatory sequence as disclosed in U.S. Patent No. 5,641,670, "Protein Production and Protein Delivery."

Ribozymes

Trans-cleaving catalytic RNAs (ribozymes) are RNA molecules possessing endoribonuclease activity. Ribozymes are specifically designed for a particular target, and the target message must contain a specific nucleotide sequence. They are engineered to cleave any RNA species site-specifically in the background of cellular RNA. The cleavage event renders the mRNA unstable and prevents protein expression. Importantly, ribozymes can be used to inhibit expression of a gene of unknown function for the purpose of determining its function in an in vitro or in vivo context, by detecting the phenotypic effect.

One commonly used ribozyme motif is the hammerhead, for which the substrate sequence requirements are minimal. Design of the hammerhead ribozyme is disclosed in Usman *et al., Current Opin. Struct. Biol.* (1996) *6*:527-533. Usman also discusses the therapeutic uses of ribozymes. Ribozymes can also be prepared and used as described in Long *et al., FASEB J.* (1993) 7:25; Symons, *Ann. Rev. Biochem.* (1992) *61*:641; Perrotta *et al., Biochem.* (1992) *31*:16-17; Ojwang *et al., Proc. Natl. Acad. Sci. (USA)* (1992) *89*:10802-10806; and U.S. Patent No. 5,254,678. Ribozyme cleavage of HIV-I RNA is described in U.S. Patent No. 5,144,019; methods of cleaving RNA using ribozymes is described in U.S. Patent No. 5,116,742; and methods for increasing the specificity of ribozymes are described in U.S. Patent No. 5,225,337 and Koizumi *et al.*,

Nucleic Acid Res. (1989) *17*:7059-7071. Preparation and use of ribozyme fragments in a hammerhead structure are also described by Koizumi *et al., Nucleic Acids Res.* (1989) *17*:7059-7071. Preparation and use of ribozyme fragments in a hairpin structure are described by Chowrira and Burke, *Nucleic Acids Res.* (1992) *20*:2835. Ribozymes can also be made by rolling transcription as described in Daubendiek and Kool, *Nat. Biotechnol.* (1997) *15(3)*:273-277.

The hybridizing region of the ribozyme may be modified or may be prepared as a branched structure as described in Horn and Urdea, *Nucleic Acids Res.* (1989) *17*:6959-67. The basic structure of the ribozymes may also be chemically altered in ways familiar to those skilled in the art, and chemically synthesized ribozymes can be administered as synthetic oligonucleotide derivatives modified by monomeric units. In a therapeutic context, liposome mediated delivery of ribozymes improves cellular uptake, as described in Birikh *et al., Eur. J. Biochem.* (1997) *245*:1-16.

Therapeutic and functional genomic applications of ribozymes proceed beginning with knowledge of a portion of the coding sequence of the gene to be inhibited. Thus, for many genes, a polynucleotide sequence as disclosed herein provides adequate sequence for constructing an effective ribozyme. A target cleavage site is selected in the target sequence, and a ribozyme is constructed based on the 5' and 3' nucleotide sequences that flank the cleavage site. Retroviral vectors are engineered to express monomeric and multimeric hammerhead ribozymes targeting the mRNA of the target coding sequence. These monomeric and multimeric ribozymes are tested in vitro for an ability to cleave the target mRNA. A cell line is stably transduced with the retroviral vectors expressing the ribozymes, and the transduction is confirmed by Northern blot analysis and reverse-transcription polymerase chain reaction (RT-PCR). The cells are screened for inactivation of the target mRNA by such indicators as reduction of expression of disease markers or reduction of the gene product of the target mRNA.

<u>Antisense</u>

Antisense nucleic acids are designed to specifically bind to RNA, resulting in the formation of RNA-DNA or RNA-RNA hybrids, with an arrest of DNA replication, reverse transcription or messenger RNA translation. Antisense polynucleotides based on a selected sequence can interfere with expression of the corresponding gene. Antisense polynucleotides are typically generated within the cell by expression from antisense constructs that contain the antisense EST strand as the transcribed strand. Antisense polynucleotides will bind and/or interfere with the translation of the corresponding mRNA. The expression products of control cells and cells treated with the antisense construct are compared to detect the protein product of the gene corresponding to the polynucleotide. The protein is isolated and identified using routine biochemical methods.

Antisense therapy for a variety of cancers is in clinical phase and has been discussed extensively in the literature. Reed reviewed antisense therapy directed at the Bcl-2 gene in tumors; gene transfer-mediated overexpression of Bcl-2 in tumor cell lines conferred resistance to many types of cancer drugs. (Reed, J.C., *N.C.I.* (1997) *89*:988-990). The potential for clinical development of antisense inhibitors of *ras* is discussed by Cowsert, L.M., *Anti-Cancer Drug Design* (1997) *12*:359-371. Additional important antisense targets include leukemia (Geurtz, A.M., *Anti-Cancer Drug Design* (1997) *12*:341-358); human C-ref kinase (Monia, B.P., *Anti-Cancer Drug Design* (1997) *12*:327-339); and protein kinase C (McGraw *et al., Anti-Cancer Drug Design* (1997) *12*:315-326.

Given the extensive background literature and clinical experience in antisense therapy, one skilled in the art can use selected polynucleotides of the invention as additional potential therapeutics. The choice of polynucleotide can be narrowed by first testing them for binding to "hot spot" regions of the genome of cancerous cells. If a polynucleotide is identified as binding to a "hot spot", testing the polynucleotide as an antisense compound in the corresponding cancer cells clearly is warranted.

Ogunbiyi *et al., Gastroenterology* (1997) *113(3)*:761-766 describe prognostic use of allelic loss in colon cancer; Barks *et al., Genes, Chromosomes, and*

Cancer (1997) *19(4)*:278-285 describe increased chromosome copy number detected by FISH in malignant melanoma; Nishizake *et al.*, *Genes, Chromosomes, and Cancer* (1997) *19(4)*:267-272 describe genetic alterations in primary breast cancer and their metastases and direct comparison using modified comparative genome hybridization; and Elo *et al.*, *Cancer Research* (1997) *57(16)*:3356-3359 disclose that loss of heterozygosity at 16z24.1-q24.2 is significantly associated with metastatic and aggressive behavior of prostate cancer.

Dominant Negative Mutations

Dominant negative mutations are readily generated for corresponding proteins that are active as homomultimers. A mutant polypeptide will interact with wild-type polypeptides (made from the other allele) and form a non-functional multimer. Thus, a mutation is in a substrate-binding domain, a catalytic domain, or a cellular localization domain. Preferably, the mutant polypeptide will be overproduced. Point mutations are made that have such an effect. In addition, fusion of different polypeptides of various lengths to the terminus of a protein can yield dominant negative mutants. General strategies are available for making dominant negative mutants. See Herskowitz, *Nature* (1987) *329*:219-222. Such a technique can be used for creating a loss of function mutation, which is useful for determining the function of a protein.

Identification of Secreted and Membrane-Bound Polypeptides

Both secreted and membrane-bound polypeptides of the present invention are of interest. For example, levels of secreted polypeptides can be assayed conveniently in body fluids, such as blood, urine, prostatic fluid and semen. Membrane-bound polypeptides are useful for constructing vaccine antigens or inducing an immune response. Such antigens would comprise all or part of the extracellular region of the membrane-bound polypeptides.

Because both secreted and membrane-bound polypeptides comprise a fragment of contiguous hydrophobic amino acids, hydrophobicity predicting algorithms can be used to identify such polypeptides.

A signal sequence is usually encoded by both secreted and membrane-bound polypeptide genes to direct a polypeptide to the surface of the cell. The signal

sequence usually comprises a stretch of hydrophobic residues. Such signal sequences can fold into helical structures.

Membrane-bound polypeptides typically comprise at least one transmembrane region that possesses a stretch of hydrophobic amino acids that can transverse the membrane. Some transmembrane regions also exhibit a helical structure.

Hydrophobic fragments within a polypeptide can be identified by using computer algorithms. Such algorithms include Hopp & Woods, Proc. Natl. Acad. Sci. USA 78: 3824-3828 (1981); Kyte & Doolittle, J. Mol. Biol. 157: 105-132 (1982); and RAOAR algorithm, Degli Esposti *et al.*, Eur. J. Biochem. 190: 207-219 (1990).

Another method of identifying secreted and membrane-bound polypeptides is to translate the present polynucleotides, SEQ ID NO:1-339, in all six frames and determine if at least 8 contiguous hydrophobic amino acids are present. Those translated polypeptides with at least 8; more typically, 10; even more typically, 12 contiguous hydrophobic amino acids are considered to be either a putative secreted or membrane bound polypeptide. Hydrophobic amino acids include alanine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, threonine, tryptophan, tyrosine, and valine.

Putative secreted and/or membrane-bound polypeptides are encoded by the sequences of the following clones: SL-5, SL-6, SL-9, SL-11, SL-13, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, and SL-177.

Construction of Polypeptides of the Invention and Variants Thereof

The polypeptides of the invention include those encoded by the disclosed polynucleotides. These polypeptides can also be encoded by nucleic acids that, by virtue of the degeneracy of the genetic code, are not identical in sequence to the disclosed polynucleotides. Thus, the invention includes within its scope nucleic acids comprising polynucleotides encoding a protein or polypeptide expressed by a polynucleotide having the sequence of any one of SEQ ID NO:1-339. Also within the scope of the invention are variants; variants of polypeptides include mutants, fragments, and fusions. Mutants can include amino acid substitutions, additions or deletions. The amino acid substitutions can be conservative amino acid substitutions or substitutions to

eliminate non-essential amino acids, such as to alter a glycosylation site, a phosphorylation site or an acetylation site, or to minimize misfolding by substitution or deletion of one or more cysteine residues that are not necessary for function. Conservative amino acid substitutions are those that preserve the general charge, hydrophobicity/hydrophilicity, and/or steric bulk of the amino acid substituted. For example, substitutions between the following groups are conservative: Gly/Ala, Val/Ile/Leu, Asp/Glu, Lys/Arg, Asn/Gln, Ser/Cys,Thr, and Phe/Trp/Tyr.

Cysteine-depleted muteins are variants within the scope of the invention. These variants can be constructed according to methods disclosed in U.S. Patent No. 4,959,314, "Cysteine-Depleted Muteins of Biologically Active Proteins." The patent discloses how to substitute other amino acids for cysteines, and how to determine biological activity and effect of the substitution. Such methods are suitable for proteins according to this invention that have cysteine residues suitable for such substitutions, for example to eliminate disulfide bond formation.

The protein variants described herein are encoded by polynucleotides that are within the scope of the invention. The genetic code can be used to select the appropriate codons to construct the corresponding variants.

The invention encompasses polynucleotide sequences having at least 65% sequence identity to any one of SEQ ID NOs:1-339 as determined by the Smith-Waterman homology search algorithm as implemented in MSPRCH program (Oxford Molecular) using an affine gap search with the following search parameters: gap open penalty of 12, and gap extension penalty of 1.

Use of the Polynucleotides as Probes, in Mapping, and in Tissue Profiling

Probes

Polynucleotide probes comprising at least 12 contiguous nucleotides selected from the nucleotide sequence of a polynucleotide of SEQ ID NO:1-339 are used for a variety of purposes, including identification of human chromosomes and determining transcription levels.

The nucleotide probes are labeled, for example, with a radioactive, fluorescent, biotinylated, or chemiluminescent label, and detected by well known

methods appropriate for the particular label selected. Protocols for hybridizing nucleotide probes to preparations of metaphase chromosomes are also well known in the art. A nucleotide probe will hybridize specifically to nucleotide sequences in the chromosome preparations which are complementary to the nucleotide sequence of the probe. A probe that hybridizes specifically to a polynucleotide should provide a detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with other unrelated sequences.

In a non-limiting example, commercial programs are available for identifying regions of chromosomes commonly associated with disease, such as cancer. Polynucleotides of the invention can be used to probe these regions. For example, if through profile searching a polynucleotide is identified as corresponding to a gene encoding a kinase, its ability to bind to a cancer-related chromosomal region will suggest its role as a kinase in one or more stages of tumor cell development/growth. Although some experimentation would be required to elucidate the role, the polynucleotide constitutes a new material for isolating a specific protein that has potential for developing a cancer diagnostic or therapeutic.

Nucleotide probes are used to detect expression of a gene corresponding to the polynucleotide. For example, in Northern blots, mRNA is separated electrophoretically and contacted with a probe. A probe is detected as hybridizing to an mRNA species of a particular size. The amount of hybridization is quantitated to determine relative amounts of expression, for example under a particular condition. Probes are also used to detect products of amplification by polymerase chain reaction. The products of the reaction are hybridized to the probe and hybrids are detected. Probes are used for in situ hybridization to cells to detect expression. Probes can also be used in vivo for diagnostic detection of hybridizing sequences. Probes are typically labeled with a radioactive isotope. Other types of detectable labels may be used such as chromophores, fluors, and enzymes.

Expression of specific mRNA can vary in different cell types and can be tissue specific. This variation of mRNA levels in different cell types can be exploited with nucleic acid probe assays to determine tissue types. For example, PCR, branched DNA probe assays, or blotting techniques utilizing nucleic acid probes substantially

identical or complementary to polynucleotides listed in the Sequence Listing can determine the presence or absence of cDNA or mRNA related to the polynucleotides of the invention.

Examples of a nucleotide hybridization assay are described in Urdea *et al.*, PCT WO92/02526 and Urdea *et al.*, U.S. Patent No. 5,124,246, both incorporated herein by reference. The references describe an example of a sandwich nucleotide hybridization assay.

Alternatively, the Polymerase Chain Reaction (PCR) is another means for detecting small amounts of target nucleic acids, as described in Mullis *et al.*, *Meth. Enzymol.* (1987) *155*:335-350; U.S. Patent No. 4,683,195; and U.S. Patent No. 4,683,202, all incorporated herein by reference. Two primer polynucleotides nucleotides hybridize with the target nucleic acids and are used to prime the reaction. The primers may be composed of sequence within or 3' and 5' to the polynucleotides of the Sequence Listing. Alternatively, if the primers are 3' and 5' to these polynucleotides, they need not hybridize to them or the complements. A thermostable polymerase creates copies of target nucleic acids from the primers using the original target nucleic acids as a template. After a large amount of target nucleic acids is generated by the polymerase, it is detected by methods such as Southern blots. When using the Southern blot method, the labeled probe will hybridize to a polynucleotide of the Sequence Listing or complement.

Furthermore, mRNA or cDNA can be detected by traditional blotting techniques described in Sambrook *et al.*, "Molecular Cloning: A Laboratory Manual" (New York, Cold Spring Harbor Laboratory, 1989). mRNA or cDNA generated from mRNA using a polymerase enzyme can be purified and separated using gel electrophoresis. The nucleic acids on the gel are then blotted onto a solid support, such as nitrocellulose. The solid support is exposed to a labeled probe and then washed to remove any unhybridized probe. Next, the duplexes containing the labeled probe are detected. Typically, the probe is labeled with radioactivity.

Mapping

Polynucleotides of the present invention are used to identify a chromosome on which the corresponding gene resides. Using fluorescence in situ hybridization (FISH) on normal metaphase spreads, comparative genomic hybridization allows total genome assessment of changes in relative copy number of DNA sequences. See Schwartz and Samad, *Current Opinions in Biotechnology* (1994) *8*:70-74; Kallioniemi *et al.*, *Seminars in Cancer Biology* (1993) *4*:41-46; Valdes and Tagle, *Methods in Molecular Biology* (1997) *68*:1, Boultwood, ed., Human Press, Totowa, NJ.

Preparations of human metaphase chromosomes are prepared using standard cytogenetic techniques from human primary tissues or cell lines. Nucleotide probes comprising at least 12 contiguous nucleotides selected from the nucleotide sequence shown in the Sequence Listing are used to identify the corresponding chromosome. The nucleotide probes are labeled, for example, with a radioactive, fluorescent, biotinylated, or chemiluminescent label, and detected by well known methods appropriate for the particular label selected. Protocols for hybridizing nucleotide probes to preparations of metaphase chromosomes are also well known in the art. A nucleotide probe will hybridize specifically to nucleotide sequences in the chromosome preparations that are complementary to the nucleotide sequence of the probe. A probe that hybridizes specifically to a polynucleotide-related gene provides a detection signal at least 5-, 10-, or 20-fold higher than the background hybridization provided with non-EST coding sequences.

Polynucleotides are mapped to particular chromosomes using, for example, radiation hybrids or chromosome-specific hybrid panels. See Leach *et al.*, *Advances in Genetics*, (1995) *33*:63-99; Walter *et al.*, *Nature Genetics* (1994) *7*:22-28; Walter and Goodfellow, *Trends in Genetics* (1992) *9*:352. Such mapping can be useful in identifying the function of the polynucleotide-related gene by its proximity to other genes with known function. Function can also be assigned to the related gene when particular syndromes or diseases map to the same chromosome.

Tissue Profiling

The polynucleotides of the present invention can be used to determine the tissue type from which a given sample is derived. For example, a metastatic lesion

is identified by its developmental organ or tissue source by identifying the expression of a particular marker of that organ or tissue. If a polynucleotide is expressed only in a specific tissue type, and a metastatic lesion is found to express that polynucleotide, then the developmental source of the lesion has been identified. Expression of a particular polynucleotide is assayed by detection of either the corresponding mRNA or the protein product. Immunological methods, such as antibody staining, are used to detect a particular protein product. Hybridization methods may be used to detect particular mRNA species, including but not limited to in situ hybridization and Northern blotting.

Use of Polymorphisms

A polynucleotide will be useful in forensics, genetic analysis, mapping, and diagnostic applications if the corresponding region of a gene is polymorphic in the human population. A particular polymorphic form of the polynucleotide may be used to either identify a sample as deriving from a suspect or rule out the possibility that the sample derives from the suspect. Any means for detecting a polymorphism in a gene are used, including but not limited to electrophoresis of protein polymorphic variants, differential sensitivity to restriction enzyme cleavage, and hybridization to an allele-specific probe.

Use of Polynucleotides to Raise Antibodies

Expression products of a polynucleotide, the corresponding mRNA or cDNA, or the corresponding complete gene are prepared and used for raising antibodies for experimental, diagnostic, and therapeutic purposes. The polynucleotide or related cDNA is expressed as described above, and antibodies are prepared. These antibodies are specific to an epitope on the polynucleotide-encoded polypeptide, and can precipitate or bind to the corresponding native protein in a cell or tissue preparation or in a cell-free extract of an in vitro expression system.

Immunogens for raising antibodies are prepared by mixing the polypeptides encoded by the polynucleotide of the present invention with adjuvants. Alternatively, polypeptides are made as fusion proteins to larger immunogenic proteins. Polypeptides are also covalently linked to other larger immunogenic proteins, such as keyhole limpet hemocyanin. Immunogens are typically administered intradermally,

subcutaneously, or intramuscularly. Immunogens are administered to experimental animals such as rabbits, sheep, and mice, to generate antibodies. Optionally, the animal spleen cells are isolated and fused with myeloma cells to form hybridomas which secrete monoclonal antibodies. Such methods are well known in the art. According to another method known in the art, the polynucleotide is administered directly, such as by intramuscular injection, and expressed in vivo. The expressed protein generates a variety of protein-specific immune responses, including production of antibodies, comparable to administration of the protein.

Preparations of polyclonal and monoclonal antibodies specific for polynucleotide-encoded proteins and polypeptides are made using standard methods known in the art. The antibodies specifically bind to epitopes present in the polypeptides encoded by polynucleotides disclosed in the Sequence Listing. Typically, at least 6, 8, 10, or 12 contiguous amino acids are required to form an epitope. However, epitopes which involve non-contiguous amino acids may require more, for example at least 15, 25, or 50 amino acids. A short sequence of a polynucleotide may then be unsuitable for use as an epitope to raise antibodies for identifying the corresponding novel protein, because of the potential for cross-reactivity with a known protein. However, the antibodies may be useful for other purposes, particularly if they identify common structural features of a known protein and a novel polypeptide encoded by a polynucleotide of the invention.

Antibodies that specifically bind to human polynucleotide-encoded polypeptides should provide a detection signal at least 5-, 10-, or 20-fold higher than a detection signal provided with other proteins when used in Western blots or other immunochemical assays. Preferably, antibodies that specifically bind polypeptides do not detect other proteins in immunochemical assays and can immunoprecipitate EST-encoded proteins from solution. For such immunoassays, any type of samples can be used, including tissue, organs, cells, urine, blood, prostatic fluid or semen.

Of interest are antibodies to the secreted polypeptides encoded by the present polynucleotide sequences, SEQ ID NO:1-339. Antibodies to secreted polypeptides can be used to test body fluids, such as blood, urine, prostatic fluid and semen.

To test for the presence of serum antibodies to the polypeptide in a human population, human antibodies are purified by methods well known in the art. Preferably, the antibodies are affinity purified by passing antiserum over a column to which a protein, polypeptide, or fusion protein is bound. The bound antibodies can then be eluted from the column, for example using a buffer with a high salt concentration.

In addition to the antibodies discussed above, genetically engineered antibody derivatives are made, such as single chain antibodies or humanized antibodies.

Antibodies to the polypeptides encoded by one or more of SEQ ID NO:1-339 also are contemplated for therapeutic compositions and uses. For example, antibodies directed to membrane-bound polypeptides that are up-regulated in cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations can be constructed. Antibodies can provide a useful therapeutic in inhibiting cell growth or inducing an immune reaction to cancer, tumor, or hyperproliferating cells. Typically, such antibodies are directed the extracellular regions of the membrane-bound polypeptide. The borders of such regions can be determined by identifying the location of the hydrophobic transmembrane fragment(s) in the encoded polypeptides of the present invention.

Exemplary antibodies were prepared using two sequences from clone SL-5: H_2N-CGPRLPSFPCPTHEPSTGQLSK-$CONH_2$ and H_2N-CKDSQGLSDFKR-NSRTTRRSYKCCONH$_2$. Using polyclonal antibodies raised against a mixture of these polypeptides, immunohistochemistry was performed on a variety of tumor tissues and corresponding normal tissue. The results are shown in Figure 3, and discussed in the Examples. These polypeptides are useful for detecting a higher level of expression of clone SL-5 in tumor tissues.

Use of Polynucleotides to Construct Arrays for Diagnostics

The present polynucleotide sequences and gene products are useful for determining the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations. Specifically, the polynucleotides and encoded polypeptides of the instant invention can be utilized to

determine the occurrence of prostatic disorders, such as BPH or localized prostate cancer.

A number of prostatic disorders exist, including adenocarcinoma, BPH, histologic prostate cancer, prostatic intraepithelial neoplasia, clinical prostate cancer, incidental prostate cancer, and localized prostate cancer. BPH is a common prostatic disorder in men which becomes clinically manifest usually after age fifty. In BPH, hyperplastic growth of prostatic cells in the periurethral glandular tissue in the central zone of the prostate gland cause an enlarged prostate which can compress or elongate the urethra and produce symptoms of urethral obstruction that may progress to urinary retention or to a constellation of symptoms known as prostatism. A host of physical manifestations can accompany prostatic disorders including: impotency, reduced urinary flow, hesitancy in initiating voiding, postvoid dribbling, a sensation of incomplete bladder emptying, and development of bladder or high urinary tract infections.

To determine the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations, the levels of polynucleotides and/or encoded polypeptides of the present invention in a sample are compared to the levels in a normal control of body tissues, cells, organs, or fluids. The normal control can include a pool of cells from a particular organ or tissue or tissues and/or cells from throughout the body. Either the immunoassays described above or the nucleic acid assays described below can be used for such measurements.

Any observed difference between the sample and normal control can indicate the occurrence of disease or disorder. Typically, if the levels of the polynucleotides and the encoded polypeptides of the present invention are higher than those found in the normal control, the results indicate the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations.

In addition, the present polynucleotides can be useful to diagnose the severity as well as the occurrence of cancer, tumor progression, hyperproliferative growth, and/or accompanying biological or physical manifestations, including prostatic disorders. For example, the greater the difference observed in the sample versus the

normal control of the present polynucleotides or encoded polypeptides, the greater the severity of the disorder, in particular, when higher levels as compared to a normal control are observed.

The present polynucleotides, as shown in SEQ ID NO:1-339, were expressed at higher levels in a prostate cancer cell line versus a normal prostate epithelial cell line.

Polynucleotide arrays provide a high throughput technique that can assay a large number of polynucleotide sequences in a sample. This technology can be used as a diagnostic and as a tool to test for differential expression to determine function of an encoded protein.

To create arrays, polynucleotide probes are spotted onto a substrate in a two-dimensional matrix or array. Samples of polynucleotides can be labeled and then hybridized to the probes. Double stranded polynucleotides, comprising the labeled sample polynucleotides bound to probe polynucleotides, can be detected once the unbound portion of the sample is washed away.

The probe polynucleotides can be spotted on substrates including glass, nitrocellulose, etc. The probes can be bound to the substrate by either covalent bonds or by non-specific interactions, such as hydrophobic interactions. The sample polynucleotides can be labeled using radioactive labels, fluorophors, etc.

Techniques for constructing arrays and methods of using these arrays are described in EP No. 0 799 897; PCT No. WO 97/29212; PCT No. WO 97/27317; EP No. 0 785 280; PCT No. WO 97/02357; U.S. Pat. No. 5,593,839; U.S. Pat. No. 5,578,832; EP No. 0 728 520; U.S. Pat. No. 5,599,695; EP No. 0 721 016; U.S. Pat. No. 5,556,752; PCT No. WO 95/22058; and U.S. Pat. No. 5,631,734.

Further, arrays can be used to examine differential expression of genes and can be used to determine gene function. For example, arrays of the instant polynucleotide sequences can be used to determine if any of the EST sequences are differentially expressed between normal cells and cancer cells, for example. High expression of a particular message in a cancer cell, which is not observed in a corresponding normal cell, can indicate a cancer specific protein.

Differential Expression

The present invention also provides a method to identify abnormal or diseased tissue in a human. For polynucleotides corresponding to profiles of protein families as described above, the choice of tissue may be dictated by the putative biological function. The expression of a gene corresponding to a specific polynucleotide is compared between a first tissue that is suspected of being diseased and a second, normal tissue of the human. The normal tissue is any tissue of the human, especially those that express the polynucleotide-related gene including, but not limited to, brain, thymus, testis, heart, prostate, placenta, spleen, small intestine, skeletal muscle, pancreas, and the mucosal lining of the colon.

The polynucleotide-related genes in the two tissues are compared by any means known in the art. For example, the two genes are sequenced, and the sequence of the gene in the tissue suspected of being diseased is compared with the gene sequence in the normal tissue. The polynucleotide-related genes, or portions thereof, in the two tissues are amplified, for example using nucleotide primers based on the nucleotide sequence shown in the Sequence Listing, using the polymerase chain reaction. The amplified genes or portions of genes are hybridized to nucleotide probes selected from the same nucleotide sequence shown in the Sequence Listing. A difference in the nucleotide sequence of the polynucleotide-related gene in the tissue suspected of being diseased compared with the normal nucleotide sequence suggests a role of the polynucleotide-encoded proteins in the disease, and provides a lead for preparing a therapeutic agent. The nucleotide probes are labeled by a variety of methods, such as radiolabeling, biotinylation, or labeling with fluorescent or chemiluminescent tags, and detected by standard methods known in the art.

Alternatively, polynucleotide-related mRNA in the two tissues is compared. PolyA$^+$ RNA is isolated from the two tissues as is known in the art. For example, one of skill in the art can readily determine differences in the size or amount of polynucleotide-related mRNA transcripts between the two tissues using Northern blots and nucleotide probes selected from the nucleotide sequence shown in the Sequence Listing. Increased or decreased expression of an polynucleotide-related mRNA in a tissue sample suspected of being diseased, compared with the expression of

the same polynucleotide-related mRNA in a normal tissue, suggests that the expressed protein has a role in the disease, and also provides a lead for preparing a therapeutic agent.

Any method for analyzing proteins is used to compare two polynucleotide-encoded proteins from matched samples. The sizes of the proteins in the two tissues are compared, for example, using antibodies of the present invention to detect polynucleotide-encoded proteins in Western blots of protein extracts from the two tissues. Other changes, such as expression levels and subcellular localization, can also be detected immunologically, using antibodies to the corresponding protein. A higher or lower level of polynucleotide-encoded protein expression in a tissue suspected of being diseased, compared with the same polynucleotide-encoded protein expression level in a normal tissue, is indicative that the expressed protein has a role in the disease, and provides another lead for preparing a therapeutic agent.

Similarly, comparison of polynucleotide gene sequences or of polynucleotide gene expression products, e.g., mRNA and protein, between a human tissue that is suspected of being diseased and a normal tissue of a human, are used to follow disease progression or remission in the human. Such comparisons of polynucleotide-related genes, mRNA, or protein are made as described above.

For example, increased or decreased expression of the polynucleotide-related gene in the tissue suspected of being neoplastic can indicate the presence of neoplastic cells in the tissue. The degree of increased expression of the polynucleotide gene in the neoplastic tissue relative to expression of the gene in normal tissue, or differences in the amount of increased expression of the polynucleotide gene in the neoplastic tissue over time, is used to assess the progression of the neoplasia in that tissue or to monitor the response of the neoplastic tissue to a therapeutic protocol over time. The expression pattern of any two cell types can be compared, such as low and high metastatic tumor cell lines, or cells from tissue which have and have not been exposed to a therapeutic agent.

Screening for Peptide Analogs and Antagonists

Polypeptides encoded by the instant polynucleotides and corresponding full length genes can be used to screen peptide libraries to identify binding partners, such as receptors, from among the encoded polypeptides.

Such binding partners can be useful in treating cancer, tumor progression, hyperproliferative cell growth, and/or accompanying biological or physical manifestations. For example, peptides or other compounds that are capable of binding or interacting with membrane-bound polypeptides encoded by one or more of SEQ ID NO:1-339, can be useful as a therapeutic. Also, peptides or other compounds capable of altering the conformation of any of the encoded polypeptides by one or more of SEQ ID NO:1-339 can inhibit biological activity and be useful as a therapeutic.

A library of peptides may be synthesized following the methods disclosed in U.S. Pat. No. 5,010,175, and in PCT WO91/17823.

Peptide agonists or antagonists are screened using any available method, such as signal transduction, antibody binding, receptor binding, mitogenic assays, chemotaxis assays, etc. The methods described herein are presently preferred. The assay conditions ideally should resemble the conditions under which the native activity is exhibited *in vivo*, that is, under physiologic pH, temperature, and ionic strength. Suitable agonists or antagonists will exhibit strong inhibition or enhancement of the native activity at concentrations that do not cause toxic side effects in the subject. Agonists or antagonists that compete for binding to the native polypeptide may require concentrations equal to or greater than the native concentration, while inhibitors capable of binding irreversibly to the polypeptide may be added in concentrations on the order of the native concentration.

The end results of such screening and experimentation will be at least one novel polypeptide binding partner, such as a receptor, encoded by a cDNA polynucleotide or gene of the invention, and at least one peptide agonist or antagonist of the novel binding partner. Such agonists and antagonists can be used to modulate, enhance, or inhibit receptor function in cells to which the receptor is native, or in cells that possess the receptor as a result of genetic engineering. Further, if the novel receptor shares biologically important characteristics with a known receptor,

information about agonist/antagonist binding may help in developing improved agonists/antagonists of the known receptor.

Therapeutics, whether polynucleotide or polypeptide or small molecule, can be tested, for example, in the mouse tumor assay described in Pei *et al.*, Mol. Endo. 11: 433-441 (1997).

Other models for testing polynucleotides, polypeptides, antibodies, or small molecules useful for treatment include: animal models and cell lines disclosed in Bosland, *Encyclopedia of Cancer*, Volume II, pages 1283 to 1296 (1997) by Academic Press. Other useful cell lines are described in Brothman, *Encyclopedia of Cancer*, Volume II, pages 1303 to 1313 (1997) by Academic Press

Pharmaceutical Compositions and Therapeutic Uses

Pharmaceutical compositions can comprise polypeptides, antibodies, or polynucleotides of the claimed invention. The pharmaceutical compositions will comprise a therapeutically effective amount of either polypeptides, antibodies, or polynucleotides of the claimed invention.

The term "therapeutically effective amount" as used herein refers to an amount of a therapeutic agent to treat, ameliorate, or prevent a desired disease or condition, or to exhibit a detectable therapeutic or preventative effect. The effect can be detected by, for example, chemical markers or antigen levels. Therapeutic effects also include reduction in physical symptoms, such as decreased body temperature. The precise effective amount for a subject will depend upon the subject's size and health, the nature and extent of the condition, and the therapeutics or combination of therapeutics selected for administration. Thus, it is not useful to specify an exact effective amount in advance. However, the effective amount for a given situation can be determined by routine experimentation and is within the judgment of the clinician. Specifically, the compositions of the present invention can be used to treat, ameliorate, modulate, or prevent cancer, tumor progression, hyperproliferative cell growth and/or accompanying biological or physical manifestations, including prostatic disorders.

For purposes of the present invention, an effective dose will be from about 0.01 mg/ kg to 50 mg/kg or 0.05 mg/kg to about 10 mg/kg of the polynucleotide, polypeptide or antibody compositions in the individual to which it is administered.

A pharmaceutical composition can also contain a pharmaceutically acceptable carrier. The term "pharmaceutically acceptable carrier" refers to a carrier for administration of a therapeutic agent, such as antibodies or a polypeptide, genes, and other therapeutic agents. The term refers to any pharmaceutical carrier that does not itself induce the production of antibodies harmful to the individual receiving the composition, and which may be administered without undue toxicity. Suitable carriers may be large, slowly metabolized macromolecules such as proteins, polysaccharides, polylactic acids, polyglycolic acids, polymeric amino acids, amino acid copolymers, and inactive virus particles. Such carriers are well known to those of ordinary skill in the art.

Pharmaceutically acceptable salts can be used therein, for example, mineral acid salts such as hydrochlorides, hydrobromides, phosphates, sulfates, and the like; and the salts of organic acids such as acetates, propionates, malonates, benzoates, and the like. A thorough discussion of pharmaceutically acceptable excipients is available in *Remington's Pharmaceutical Sciences* (Mack Pub. Co., N.J. 1991).

Pharmaceutically acceptable carriers in therapeutic compositions may contain liquids such as water, saline, glycerol and ethanol. Additionally, auxiliary substances, such as wetting or emulsifying agents, pH buffering substances, and the like, may be present in such vehicles. Typically, the therapeutic compositions are prepared as injectables, either as liquid solutions or suspensions; solid forms suitable for solution in, or suspension in, liquid vehicles prior to injection may also be prepared. Liposomes are included within the definition of a pharmaceutically acceptable carrier.

Delivery Methods

Once formulated, the polynucleotide compositions of the invention can be (1) administered directly to the subject; (2) delivered ex vivo, to cells derived from the subject; or (3) delivered in vitro for expression of recombinant proteins.

Direct delivery of the compositions will generally be accomplished by injection, either subcutaneously, intraperitoneally, intravenously or intramuscularly, or delivered to the interstitial space of a tissue. The compositions can also be administered into a tumor or lesion. Other modes of administration include oral and pulmonary administration, suppositories, and transdermal applications, needles, and gene guns or hyposprays. Dosage treatment may be a single dose schedule or a multiple dose schedule.

Methods for the ex vivo delivery and reimplantation of transformed cells into a subject are known in the art and described in e.g., International Publication No. WO 93/14778. Examples of cells useful in ex vivo applications include, for example, stem cells, particularly hematopoetic, lymph cells, macrophages, dendritic cells, or tumor cells.

Generally, delivery of nucleic acids for both ex vivo and in vitro applications can be accomplished by, for example, dextran-mediated transfection, calcium phosphate precipitation, polybrene mediated transfection, protoplast fusion, electroporation, encapsulation of the polynucleotide(s) in liposomes, and direct microinjection of the DNA into nuclei, all well known in the art.

If a polynucleotide-related gene correlates with a proliferative disorder, such as neoplasia, dysplasia, and hyperplasia, the disorder may be amenable to treatment by administration of a therapeutic agent based on the polynucleotide or corresponding polypeptide.

Preparation of antisense polypeptides is discussed above. Neoplasias that are treated with the antisense composition include, but are not limited to, cervical cancers, melanomas, colorectal adenocarcinomas, Wilms' tumor, retinoblastoma, sarcomas, myosarcomas, lung carcinomas, leukemias, such as chronic myelogenous leukemia, promyelocytic leukemia, monocytic leukemia, and myeloid leukemia, and lymphomas, such as histiocytic lymphoma. Proliferative disorders that are treated with the therapeutic composition include disorders such as anhydric hereditary ectodermal dysplasia, congenital alveolar dysplasia, epithelial dysplasia of the cervix, fibrous dysplasia of bone, and mammary dysplasia. Hyperplasias, for example, endometrial, adrenal, breast, prostate, or thyroid hyperplasias or pseudoepitheliomatous hyperplasia

of the skin, are treated with antisense therapeutic compositions. Even in disorders in which mutations in the corresponding gene are not implicated, downregulation or inhibition of gene expression can have therapeutic application. For example, decreasing gene expression can help to suppress tumors in which enhanced expression of the gene is implicated.

Both the dose of the antisense composition and the means of administration are determined based on the specific qualities of the therapeutic composition, the condition, age, and weight of the patient, the progression of the disease, and other relevant factors. Administration of the therapeutic antisense agents of the invention includes local or systemic administration, including injection, oral administration, particle gun or catheterized administration, and topical administration. Preferably, the therapeutic antisense composition contains an expression construct comprising a promoter and a polynucleotide segment of at least 12, 22, 25, 30, or 35 contiguous nucleotides of the antisense strand. Within the expression construct, the polynucleotide segment is located downstream from the promoter, and transcription of the polynucleotide segment initiates at the promoter.

Various methods are used to administer the therapeutic composition directly to a specific site in the body. For example, a small metastatic lesion is located and the therapeutic composition injected several times in several different locations within the body of tumor. Alternatively, arteries which serve a tumor are identified, and the therapeutic composition injected into such an artery, in order to deliver the composition directly into the tumor. A tumor that has a necrotic center is aspirated and the composition injected directly into the now empty center of the tumor. The antisense composition is directly administered to the surface of the tumor, for example, by topical application of the composition. X-ray imaging is used to assist in certain of the above delivery methods.

Receptor-mediated targeted delivery of therapeutic compositions containing an antisense polynucleotide, subgenomic polynucleotides, or antibodies to specific tissues is also used. Receptor-mediated DNA delivery techniques are described in, for example, Findeis *et al.*, *Trends in Biotechnol.* (1993) *11*:202-205; Chiou *et al.*, (1994) Gene Therapeutics: Methods And Applications Of Direct Gene Transfer (J.A.

Wolff, ed.); Wu & Wu, *J. Biol. Chem.* (1988) *263*:621-24; Wu *et al.*, *J. Biol. Chem.* (1994) *269*:542-46; Zenke *et al.*, *Proc. Natl. Acad. Sci. (USA)* (1990) *87*:3655-59; Wu *et al.*, *J. Biol. Chem.* (1991) *266*:339-42. Preferably, receptor-mediated targeted delivery of therapeutic compositions containing antibodies of the invention is used to deliver the antibodies to specific tissue.

Therapeutic compositions containing antisense subgenomic polynucleotides are administered in a range of about 100 ng to about 200 mg of polynucleotides for local administration in a gene therapy protocol. Concentration ranges of about 500 ng to about 50 mg, about 1 μg to about 2 mg, about 5 μg to about 500 μg, and about 20 μg to about 100 μg of polynucleotides can also be used during a gene therapy protocol. Factors such as method of action and efficacy of transformation and expression are considerations which will affect the dosage required for ultimate efficacy of the antisense subgenomic polynucleotides. Where greater expression is desired over a larger area of tissue, larger amounts of EST antisense subgenomic polynucleotides or the same amounts readministered in a successive protocol of administrations, or several administrations to different adjacent or close tissue portions of, for example, a tumor site, may be required to effect a positive therapeutic outcome. In all cases, routine experimentation in clinical trials will determine specific ranges for optimal therapeutic effect. A more complete description of gene therapy vectors, especially retroviral vectors, is contained in U.S. Serial No. 08/869,309, which is expressly incorporated herein, and in section G below.

For genes encoding polypeptides or proteins with anti-inflammatory activity, suitable use, doses, and administration are described in U.S. Patent No. 5,654,173, incorporated herein by reference. Therapeutic agents also include antibodies to proteins and polypeptides, as described in U.S. Patent No. 5,654,173.

Gene Therapy

The therapeutic polynucleotides and polypeptides of the present invention may be utilized in gene delivery vehicles. The gene delivery vehicle may be of viral or non-viral origin (see generally, Jolly, *Cancer Gene Therapy* (1994) *1*:51-64; Kimura, *Human Gene Therpay* (1994) *5*:845-852; Connelly, *Human Gene Therapy*

(1995) *1*:185-193; and Kaplitt, *Nature Genetics* (1994) *6*:148-153). Gene therapy vehicles for delivery of constructs including a coding sequence of a therapeutic of the invention can be administered either locally or systemically. These constructs can utilize viral or non-viral vector approaches. Expression of such coding sequences can be induced using endogenous mammalian or heterologous promoters. Expression of the coding sequence can be either constitutive or regulated.

The present invention can employ recombinant retroviruses which are constructed to carry or express a selected nucleic acid molecule of interest. Retrovirus vectors that can be employed include those described in EP 0 415 731; WO 90/07936; WO 94/03622; WO 93/25698; WO 93/25234; U.S. Patent No. 5, 219,740; WO 93/11230; WO 93/10218; Vile and Hart, *Cancer Res.* (1993) *53*:3860-3864; Vile and Hart, *Cancer Res.* (1993) *53*:962-967; Ram et al., *Cancer Res.* (1993) *53*:83-88; Takamiya et al., J. *Neurosci. Res.* (1992) *33*:493-503; Baba et al., *J. Neurosurg.* (1993) *79*:729-735; U.S. Patent no. 4,777,127; GB Patent No. 2,200,651; and EP 0 345 242. Preferred recombinant retroviruses include those described in WO 91/02805.

Packaging cell lines suitable for use with the above-described retroviral vector constructs may be readily prepared (see PCT publications WO 95/30763 and WO 92/05266), and used to create producer cell lines (also termed vector cell lines) for the production of recombinant vector particles. Within particularly preferred embodiments of the invention, packaging cell lines are made from human (such as HT1080 cells) or mink parent cell lines, thereby allowing production of recombinant retroviruses that can survive inactivation in human serum.

The present invention also employs alphavirus-based vectors that can function as gene delivery vehicles. Such vectors can be constructed from a wide variety of alphaviruses, including, for example, Sindbis virus vectors, Semliki forest virus (ATCC VR-67; ATCC VR-1247), Ross River virus (ATCC VR-373; ATCC VR-1246) and Venezuelan equine encephalitis virus (ATCC VR-923; ATCC VR-1250; ATCC VR 1249; ATCC VR-532). Representative examples of such vector systems include those described in U.S. Patent Nos. 5,091,309; 5,217,879; and 5,185,440; and PCT Publication Nos. WO 92/10578; WO 94/21792; WO 95/27069; WO 95/27044; and WO 95/07994.

Gene delivery vehicles of the present invention can also employ parvovirus such as adeno-associated virus (AAV) vectors. Representative examples include the AAV vectors disclosed by Srivastava in WO 93/09239, Samulski et al., *J. Vir.* (1989) *63*:3822-3828; Mendelson et al., *Virol.* (1988) *166*:154-165; and Flotte et al., *PNAS* (1993) *90*:10613-10617.

Representative examples of adenoviral vectors include those described by Berkner, *Biotechniques* (1988) *6*:616-627; Rosenfeld et al., *Science* (1991) *252*:431-434; WO 93/19191; Kolls et al., *PNAS* (1994) *91*:215-219; Kass-Eisler et al., *PNAS* (1993) *90*:11498-11502; Guzman et al., *Circulation* (1993) *88*:2838-2848; Guzman et al., *Cir. Res.* (1993) *73*:1202-1207; Zabner et al., *Cell* (1993) *75*:207-216; Li et al., *Hum. Gene Ther.* (1993) *4*:403-409; Cailaud et al., *Eur. J. Neurosci.* (1993) *5*:1287-1291; Vincent et al., *Nat. Genet.* (1993) *5*:130-134; Jaffe et al., *Nat. Genet.* (1992) *1*:372-378; and Levrero et al., *Gene* (1991) *101*:195-202. Exemplary adenoviral gene therapy vectors employable in this invention also include those described in WO 94/12649, WO 93/03769; WO 93/19191; WO 94/28938; WO 95/11984 and WO 95/00655. Administration of DNA linked to killed adenovirus as described in Curiel, *Hum. Gene Ther.* (1992) *3*:147-154 may be employed.

Other gene delivery vehicles and methods may be employed, including polycationic condensed DNA linked or unlinked to killed adenovirus alone, for example Curiel, *Hum. Gene Ther.* (1992) *3*:147-154; ligand linked DNA, for example see Wu, *J. Biol. Chem.* (1989) *264*:16985-16987; eukaryotic cell delivery vehicles cells, for example see U.S. Serial No. 08/240,030, filed May 9, 1994, and U.S. Serial No. 08/404,796; deposition of photopolymerized hydrogel materials; hand-held gene transfer particle gun, as described in U.S. Patent No. 5,149,655; ionizing radiation as described in U.S. Patent No. 5,206,152 and in WO92/11033; nucleic charge neutralization or fusion with cell membranes. Additional approaches are described in Philip, *Mol. Cell Biol.* (1994) *14*:2411-2418, and in Woffendin, *Proc. Natl. Acad. Sci.* (1994) *91*:1581-1585.

Naked DNA may also be employed. Exemplary naked DNA introduction methods are described in WO 90/11092 and U.S. Patent No. 5,580,859.

Further non-viral delivery suitable for use includes mechanical delivery systems such as the approach described in Woffendin *et al.*, *Proc. Natl. Acad. Sci. USA* (1994) *91*(24):11581-11585.

Computer-Related Embodiments

In general, a library of polynucleotides is a collection of sequence information, which information is provided in either biochemical form (*e.g.*, as a collection of polynucleotide molecules), or in electronic form (*e.g.*, as a collection of polynucleotide sequences stored in a computer-readable form, as in a computer system and/or as part of a computer program). The sequence information of the polynucleotides can be used in a variety of ways, *e.g.*, as a resource for gene discovery, as a representation of sequences expressed in a selected cell type (*e.g.*, cell type markers), and/or as markers of a given disease or disease state. In general, a disease marker is a representation of a gene product that is present in all cells affected by disease either at an increased or decreased level relative to a normal cell (*e.g.*, a cell of the same or similar type that is not substantially affected by disease).

The nucleotide sequence information of the library can be embodied in any suitable form, *e.g.*, electronic or biochemical forms. For example, a library of sequence information embodied in electronic form comprises an accessible computer data file (or, in biochemical form, a collection of nucleic acid molecules) that contains the representative nucleotide sequences of genes that are differentially expressed (*e.g.*, overexpressed or underexpressed) as between, for example, a cancerous cell and a normal cell. Biochemical embodiments of the library include a collection of nucleic acids that have the sequences of the genes in the library, where the nucleic acids can correspond to the entire gene in the library or to a fragment thereof, as described in greater detail below.

The polynucleotide libraries of the subject invention generally comprise sequence information of a plurality of polynucleotide sequences, where at least one of the polynucleotides has a sequence of any of SEQ ID NOs:1-339. By plurality is meant at least 2, usually at least 3 and can include up to all of SEQ ID NOs:1-339. The length and number of polynucleotides in the library will vary with the nature of the library,

e.g., if the library is an oligonucleotide array, a cDNA array, a computer database of the sequence information, etc.

Where the library is an electronic library, the nucleic acid sequence information can be present in a variety of media. "Media" refers to a manufacture, other than an isolated nucleic acid molecule, that contains the sequence information of the present invention. Such a manufacture provides the genome sequence or a subset thereof in a form that can be examined by means not directly applicable to the sequence as it exists in a nucleic acid. For example, the nucleotide sequence of the present invention, *e.g.*, the nucleic acid sequences of any of the polynucleotides of SEQ ID NOs:1-339, can be recorded on computer readable media, *e.g.*, any medium that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as a floppy disc, a hard disc storage medium, and a magnetic tape; optical storage media such as CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media. One of skill in the art can readily appreciate how any of the presently known computer readable mediums can be used to create a manufacture comprising a recording of the present sequence information. "Recorded" refers to a process for storing information on computer readable medium, using any such methods as known in the art. Any convenient data storage structure can be chosen, based on the means used to access the stored information. A variety of data processor programs and formats can be used for storage, *e.g.*, word processing text file, database format, *etc.* In addition to the sequence information, electronic versions of the libraries of the invention can be provided in conjunction or connection with other computer-readable information and/or other types of computer-readable files (*e.g.*, searchable files, executable files, *etc*, including, but not limited to, for example, search program software, *etc.*).

By providing the nucleotide sequence in computer readable form, the information can be accessed for a variety of purposes. Computer software to access sequence information is publicly available. For example, the BLAST (Altschul et al., *supra.*) and BLAZE (Brutlag et al. *Comp. Chem.* (1993) 17:203) search algorithms on a Sybase system can be used to identify open reading frames (ORFs) within the genome that contain homology to ORFs from other organisms.

As used herein, "a computer-based system" refers to the hardware means, software means, and data storage means used to analyze the nucleotide sequence information of the present invention. The minimum hardware of the computer-based systems of the present invention comprises a central processing unit (CPU), input means, output means, and data storage means. A skilled artisan can readily appreciate that any one of the currently available computer-based system are suitable for use in the present invention. The data storage means can comprise any manufacture comprising a recording of the present sequence information as described above, or a memory access means that can access such a manufacture.

"Search means" refers to one or more programs implemented on the computer-based system, to compare a target sequence or target structural motif, or expression levels of a polynucleotide in a sample, with the stored sequence information. Search means can be used to identify fragments or regions of the genome that match a particular target sequence or target motif. A variety of known algorithms are publicly known and commercially available, *e.g.*, MacPattern (EMBL), BLASTN and BLASTX (NCBI). A "target sequence" can be any polynucleotide or amino acid sequence of six or more contiguous nucleotides or two or more amino acids, preferably from about 10 to 100 amino acids or from about 30 to 300 nt A variety of comparing means can be used to accomplish comparison of sequence information from a sample (*e.g.*, to analyze target sequences, target motifs, or relative expression levels) with the data storage means. A skilled artisan can readily recognize that any one of the publicly available homology search programs can be used as the search means for the computer based systems of the present invention to accomplish comparison of target sequences and motifs. Computer programs to analyze expression levels in a sample and in controls are also known in the art.

A "target structural motif," or "target motif," refers to any rationally selected sequence or combination of sequences in which the sequence(s) are chosen based on a three-dimensional configuration that is formed upon the folding of the target motif, or on consensus sequences of regulatory or active sites. There are a variety of target motifs known in the art. Protein target motifs include, but arc not limited to, enzyme active sites and signal sequences. Nucleic acid target motifs include, but are

not limited to, hairpin structures, promoter sequences and other expression elements such as binding sites for transcription factors.

A variety of structural formats for the input and output means can be used to input and output the information in the computer-based systems of the present invention. One format for an output means ranks the relative expression levels of different polynucleotides. Such presentation provides a skilled artisan with a ranking of relative expression levels to determine a gene expression profile..

As discussed above, the "library" of the invention also encompasses biochemical libraries of the polynucleotides of SEQ ID NOs:1-339, *e.g.*, collections of nucleic acids representing the provided polynucleotides. The biochemical libraries can take a variety of forms, *e.g.*, a solution of cDNAs, a pattern of probe nucleic acids stably associated with a surface of a solid support (*i.e.*, an array) and the like. Of particular interest are nucleic acid arrays in which one or more of SEQ ID NOs:1-339 is represented on the array. By array is meant a an article of manufacture that has at least a substrate with at least two distinct nucleic acid targets on one of its surfaces, where the number of distinct nucleic acids can be considerably higher, typically being at least 10 nt, usually at least 20 nt and often at least 25 nt. A variety of different array formats have been developed and are known to those of skill in the art. The arrays of the subject invention find use in a variety of applications, including gene expression analysis, drug screening, mutation analysis and the like, as disclosed in the above-listed exemplary patent documents.

In addition to the above nucleic acid libraries, analogous libraries of polypeptides are also provided, where the where the polypeptides of the library will represent at least a portion of the polypeptides encoded by SEQ ID NOs:1-339.

The present invention will now be illustrated by reference to the following examples which set forth particularly advantageous embodiments. However, it should be noted that these embodiments are illustrative and are not to be construed as restricting the invention in any way.

EXAMPLES

EXAMPLE 1

ISOLATION OF THE POLYNUCLEOTIDES

cDNA libraries were prepared from PrEC, normal human prostate epithelial cells, and LNCaP, a cell line derived from human lymph node metastasized prostate cancer. PrEC cells are available from Clonetics, San Diego, California, U.S.A. LNCaP cells are available from the ATCC, Manassas, Virginia, U.S.A.

Using a PCR technique and reagents available from Clontech, Palo Alto, California, USA (CLONTECH PCR-Select™), mRNA up-regulated in LNCaP was captured and amplified. The captured polynucleotide inserts were inserted in the pCR2.1 vector, available from Invitrogen, Carlsbad, California, U.S.A. The vectors with the inserts were transformed into *E. coli* cells.

EXAMPLE 2

CONFIRMATION OF DIFFERENTIAL DISPLAY

Ten clones were chosen at random, and up-regulation of the sequences of these clone inserts in LNCaP versus PrEC cells was confirmed by Northern blot. Dot blots were performed on 168 clones and up-regulation was confirmed.

Further, sequencing of the clones showed that prostate specific antigen (PSA) and prostate specific membrane antigen (PSMA) sequences were isolated by the process described in Example 1. A good correlation between increased serum PSA levels and prostate tumors has been observed. PSMA, a cell surface antigen, is another observed marker for prostate cancer. See Bosland, Encyclopedia of Cancer, Volume II, pages 1283-1296 (1997), Academic Press. Thus, the data confirm that up-regulated mRNA characteristic of gene expression in prostate cancer was cloned by the method of Example 1.

EXAMPLE 3

POLYNUCLEOTIDE SEQUENCES

The sequence results are shown in SEQ ID NO:1-339. For the sequencing experiments, each clone was named SL-1 to SL-209. Inserts from some of the clones were sequenced more than once. Each sequence was designated a unique combination of two names. This unique combination is shown in Table 1 in columns 2 and 3, denoted as "Sequence Name" and "Other Seq Name."

Table 1 indicates all the sequences that correspond to each clone. Thus, all the sequences corresponding to clone SL-3, for example, are grouped together in Table 1.

Clones also were assigned cluster numbers. See column 4 of Table 1. Clones with the same cluster number generally comprise sequence derived from the same mRNA transcripts.

The last column of Table 1 indicates the nearest neighbor as determined by an alignment to sequences in a publicly available database.

A consensus for the sequence of each clone can be constructed by aligning the corresponding sequences or reverse complements thereof. Table 1 lists the names of all the sequences that correspond to each clone, and Table 2 shows the specific sequence that corresponds to each unique combination of Sequence Name and/or "Other Seq. Name."

The entire insert of some clones may not be represented by the sequences presented in Table 2. For example, the 5' and 3' ends of a clone insert may have been sequenced, but the sequences do not overlap. Additional sequence corresponding to the clone insert can be isolated and determined by constructing probes or primers from the sequences presented in Table 2 and a library of mRNA or cDNA from a prostate cell or prostate cancer cell line using the methods described above.

EXAMPLE 4

RESULTS OF PUBLIC DATABASE SEARCH

Both the nucleotide sequence and translations of masked sequences shown in the Sequence Listing were aligned with individual sequences that were publicly available. Similarity with individual sequences is used to determine the activity of the polypeptides encoded by genes corresponding to the sequences referred to in Table 2.

The sequences in SEQ ID NO:1-333 first were masked to remove the pCR2.1 vector sequences. Masking was performed by aligning the pCR2.1 sequences with each of SEQ ID NO:1-333 using the BLASTN program. Any sequence that produced an alignment with a score of less that 0.1 was masked.

A BLASTN vs. Genbank search was performed using the masked sequences with search parameters of greater than 99% overlap, 99% identity, and a p value of less than 1 x 10^{-40} and this resulted in discard of sequences. Sequences from this search also were discarded if the inclusive parameters were met, but the sequence was ribosomal or vector-derived.

The resulting sequences from the previous search were classified into three groups (1, 2 and 3 below) and searched in a BLASTX vs. NRP (non-redundant proteins) database search: (1) unknown (no hits in the Genbank search), (2) weak similarity (greater than 45% identity and p value of less than 1 x 10^{-5}), and (3) high similarity (greater than 60% overlap, greater than 80% identity, and p value less than 1 x 10^{-5}). This search resulted in discard of sequences as having greater than 99% overlap, greater than 99% identity, and p value of less than 1 x 10^{-40}.

The remaining sequences were classified as unknown (no hits), weak similarity, and high similarity (parameters as above). Two searches were performed on this set of sequences. First, a BLAST vs. EST database search resulted in discard of sequences with greater than 99% overlap, greater than 99% similarity and a p value of less than 1 x 10^{-40}; sequences with a p value of less than 1 x 10^{-65} when compared to a database sequence of human origin were also excluded. Second, a BLASTN vs. Patent

GeneSeq database resulted in discard of sequences with greater than 99% identity; p value less than 1×10^{-40}; greater than 99% overlap.

The masked sequences were translated in all six reading frames to determine the best alignment with the individual sequences. These amino acid sequences and nucleotide sequences are referred, generally, as query sequences, which are aligned with the individual sequences.

Query and individual sequences were aligned using the BLAST programs, available over the world wide web.

Table 2 shows the results of the alignments. Table 2 refers to each sequence by its Sequence Name and/or "Other Seq. Name" and includes the accession numbers and descriptions of nearest neighbors from the Genbank and Non-Redundant Protein searches.

The activity of the polypeptide encoded by the sequences referred to in Table 2 is expected to be the same or similar to the nearest neighbor reported in Table 2. The accession number of the nearest neighbor is reported, providing a reference to the activities exhibited by the nearest neighbor. The search program and database used for the alignment also are indicated as well as a calculation of the p value.

Full length sequences or fragments of the polynucleotide sequences of the nearest neighbors can be used as probes and primers to identify and isolate the full length sequence corresponding to sequence referred to in Table 2. Although full length sequences can be obtained from the cell lines described above, the nearest neighbors can indicate a tissue or cell type to be used to construct a library for the full-length sequences of those referred to in Table 2.

The sequences referred to in Table 2 and the translations thereof may be human homologs of known genes of other species or novel allelic variants of known human genes. In such cases, these new human sequences may be suitable as diagnostics, prognostics, or therapeutics. As diagnostics, the human sequences exhibit greater specificity in detecting and differentiating human cell lines and types than homologs of other species. The human polypeptides are less likely to be immunogenic when administered to humans than homologs from other species. Further, on

administration to humans, the encoded polypeptides can show greater specificity or can be better regulated by other human proteins than are homologs from other species.

In the preferred embodiments of the invention, the sequences shown in SEQ ID NO:1-339 consisting of the unmasked regions should be considered as the source of probes and primers, as these sequences are most representative of the distinguishing portions of these polynucleotides.

Generally, the masking itself does not influence the search results as shown in Table 2, except to eliminate multiple "hits" based on similarity to repetitive regions common to more than one polypeptide.

EXAMPLE 5

ANALYSIS OF CLONES SL-5, SL-9, SL-68, AND SL-173

Clone SL-5 (SEQ ID NO:14 and 334)

By Northern Blot, a 4.1 kb band was observed in expressed in normal prostate, testis,and lymphoblasic leukemia. It was also expressed in the cell lines LNCaP, and MDA PCa 2A and 2B (metastatic prostate cells into bone, androgen sensitive). Additional sequence corresponding to SEQ ID NO:14 is disclosed in SEQ ID NO:334.

Expression of SL-5 was investigated in normal and tumor tissues using immunohistochemistry. Antibody was prepared using two sequences from clone SL-5: H_2N-CGPRLPSFPCPTHEPSTGQLSK-$CONH_2$ and H_2N-CKDSQGLSDFKRNSRTTR-RSYKCCONH$_2$. Using polyclonal antibodies raised against a mixture of these polypeptides, immunohistochemistry (IHC) was performed on a variety of tumor tissues and corresponding normal tissue. The methods used were those described for the Manual IHC Protocol using BioGenex Reagents and Zymed AEC Solution, as known in the art. As shown in Figure 3, SL-5 was detected in the following tumor tissue: adrenal, ovary, breast, colon, prostate, uterus, cervix, kidney, pancreas, liver, stomach, lymphoma, seminoma, thyroid, melanoma, basal cell carcinoma, and other tumor tissues. Where comparative normal tissue was available, expression in the

corresponding normal tissue was lower than in the tumor tissue. Thus, SL-5 is a useful marker for cancer tissue including prostate.

Clone SL-9 (SEQ ID NO:18)

By Northern Blot, sequences from SL-9 were specifically expressed in normal spleen and normal peripheral blood leukocyte. Expression of the SL-9 sequences was observed also in promyelocytic leukemia HL-60, chronic mylogenous leukemia K-562, lymphoblastic leukemia MOLT-4, Burkitt's lymphoma, and Raji cancer cell lines by Northern Blot.

Clone SL-173 (SEQ ID NO:153 and 154)

By Northern Blot, SL173 was found in every cancer cell line tested. Sequence from SL-173 has similarity to and may be a human homologue of the rat tumor transforming gene, which was found in the pituitary and described in Pei *et al.*, Mol. Endo. 11: 433-441 (1997) and Pei, J. Biol. Chem. 273(9): 5219-5225 (1998). When the rat tumor transforming gene was injected in NIH3T3cells, the cells became transformed and were able to form a tumor when injected into mice. (Pei *et al.*, Mol. Endo. supra).

Clone SL-68 (SEQ ID NO:218 and 219)

Two transcripts, 2.6kb and 4.3kb, were observed in normal spleen, thymus and peripheral blood leukocytes, as well as in promyelocytic leukemia, chronic myelogenous leukemia and lymphoblastic leukemia. The 4.3kb transcript was seen in normal testis, colon, Hela cell S3, colorectal adenocarcinoma and melanoma. The 2.6kb band was found in the following prostate cell lines: PC-3 (metastatic to bone, androgen insensitive); DU-145 (metastatic to brain, androgen insensitive); FFpz (primary cells derived from normal prostate epithelium); Ffca (primary cells derived from Gleason Grade 3 prostate cancer epithelium); and WO-CA (primary cells derived from Gleason Grade 4 prostate cancer epithelium). However, higher expression was observed in LNCaP, MDA PCa 2A, HPV-7 and HPV-10. A 9.5kb transcript was also observed in MDA PCa 2A and 2B. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:335.

Clone SL69 (SEQ ID NO:220 and 221)

A weak 2.6kb band was observed in normal testis as well as in chronic myelogenous leukemia and lymphoblastic leukemia. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:336.

Clone SL86 (SEQ ID NO:242 and 243)

The sequence was expressed in normal prostate (2.7kb and 1.1kb) and testis (1.1kb). Low expression was observed in a cancer cell line blot using the cell lines described above. 1.1kb and 2.7kb transcripts were observed in the cell lines LNCaP, and MDA PCa 2a and 2b (metastatic prostate cells into bone, androgen sensitive), and weak 1.1kb transcript was seen in HPV-7 (immortalized normal prostate cells) and HPV-10 (immortalized prostate cancer cells). Additional sequence corresponding to this clone is disclosed in SEQ ID NO:337.

Clone SL195 (SEQ ID NO:288 and 289)

The sequence was expressed in normal prostate as a 1.9kb transcript, and the same transcript also observed in all cell lines in the cancer cell line blot described above. It was more heavily expressed in HeLa cell S3 and chronic myelogenous leukemia, and was expressed in all prostate cell lines. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:338.

Clone SL197 (SEQ ID NO:292 and 293)

Two transcripts, 2.4kb and 4kb, were observed in normal prostate and testis. Two very weak 2.4kb signals were observed in Hela cell S3 and chronic myelogenous leukemia. The 2.4kb transcript was expressed in all prostate cell lines. A 4kb transcript was found in LNCaP, MDA PCa 2A and 2B. Additional sequence corresponding to this clone is disclosed in SEQ ID NO:339.

Those skilled in the art will recognize, or be able to ascertain, using not more than routine experimentation, many equivalents to the specific embodiments of

the invention described herein. Such specific embodiments and equivalents are intended to be encompassed by the following claims.

All patents, published patent applications and publications cited herein are incorporated by reference as if set forth fully herein.

TABLE 1 PATENT

Clone #	Sequence Name	Other Seq Name	Clone # Cluster #	Nearest Neighbor If Available
SL-001	SL001 SL001M13	19sl1	**SL-001**	S60754 (VNTR locus DXZ4)
SL-002	SL002	20sl2	**SL-002**	L07935 HUMVNTRA
SL-003	SL003 SL003 SL003 SL003 SL003	21sl3 35-sl3-1m13 35-sl3-1t7 37-sl3-1m13 39-sl3-1m13	**SL-003**	AB006625 - KIAA0287 gene
SL-004	SL004 SL004M13	22sl4	**SL-004**	
SL-005	SL005 SL005	23sl5 30sl11b	**SL-005**	
SL-006	SL006 SL006M13	24sl6	**SL-006**	cosmid genomic clone
SL-007	SL007 SL007 SL007 SL007 SL007 SL007 SL007	25sl7 28-sl7-1m13 28-sl7-1t7 30-sl7-1m13 30-sl7-1t7 32-sl7-1m13 32-sl7-1t7	**SL-003**	AB006625-KIAA0287
SL-008	SL008	26sl8	**SL-008**	HUMP65 E=9e-62 L-plastin. Phosphoprotein (p65)
SL-009	SL009 SL009M13	27sl9		
SL-010	SL010	28sl10	**SL-005**	
SL-011	SL011	29sl11a	**SL-011**	HSU10685 - MAGE-10 Gene
SL-012	SL012	31sl12	**SL-011**	HSU10685 - MAGE-10 Gene
SL-013	SL013	32sl13		
SL-015	SL015 SL015 SL015 SL015	34sl15 46-sl15-2m13 47-sl15-2m13 47-sl15-2t7	**SL-015**	HSU90336 - PEG3 mRNA HSMRNAEN - Enkephalinase
SL-016	SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016 SL016	10-sl16-1m13 10-sl16-1t7 11-sl16-1m13 18-sl16-2m13 18-sl16-2t7 19-sl16-2m13 19-sl16-2t7 20-sl16-2m13 20-sl16-2t7 35sl16	**SL-016**	

TABLE 1 PATENT

	SL016	9-sl16-1t7		
SL-017	SL017	36sl17	SL-017	HUMORF01 - KIAA0101 gene
SL-028	SL028m13	B1	SL-028	
	SL028t7	B1		
SL-029	SL029m13	WE97.C1.M13	SL-029	
	SL029t7	WE97.C1.T7		
SL-032	SL032m13	WE97.D1.M13	SL-032	HSTPI1G TPI1 gene
	SL032t7	WE97.D1.T7		for triosephosphate isomerase.
SL-036	SL036m13	WE97.E1.M13	SL-036	HSU81599 homeodomain protein
	SL036t7	WE97.E1.T7		HOXB13
SL-037	SL037m13	C1	SL-005	
	SL037m13	WE97.F1.M13		
	SL037t7	C1		
SL-040	SL040m13	D1	SL-040	
	SL040t7	D1		
SL-041	SL041m13	E1	SL-016	
	SL041m13	WE97.H1.M13		
	SL041t7	E1		
	SL041t7	WE97.H1.T7		
SL-042	SL042m13	WE97.A2.M13	SL-008	HUMP65 phosphoprotein (p65)
	SL042t7	WE97.A2.T7		HUMPLASTA L-plastin gene
SL-044	SL044m13	WE97.B2.M13	SL-016	
	SL-044t7	WE97.B2.T7		
SL-045	SL045m13	WE97.C2.M13	SL-045	
	SL045t7	WE97.C2.T7		genomic DNA
SL-046	SL046m13	WE97.D2.M13	SL-046	
	SL046t7	WE97.D2.T7		
SL-047	SL047m13	WE97.E2.M13	SL-047	
	SL047t7	WE97.E2.T7		
SL-050	SL050m13	WE97.F2.M13	SL-050	
	SL050t7	WE97.F2.T7		
SL-051	SL051m13	WE97.G2.M13	SL-051	
	SL051t7	WE97.G2.T7		
SL-054	SL054m13	WE97.H2.M13	SL-054	
	SL054t7	WE97.H2.T7		
SL-055	SL055m13	F1	SL-050	
	SL055t7	F1		
	SL055t7	WE97.A3.T7		

TABLE 1

PATENT

SL-057	SL057m13 SL057t7	WE97.C3.M13 WE97.C3.T7	**SL-057**	
SL-058	SL058m13 SL058t7	WE97.D3.M13 WE97.D3.T7	**SL-058**	HSLRPR1GN leucine-rich primary response protein 1.
SL-061	SL061m13 SL061t7	WE97.E3.M13 WE97.E3.T7	**SL-028**	
SL-062	SL062m13 SL062t7	WE97.F3.M13 WE97.F3.T7	**SL-028**	
SL-064	SL064m13 SL064t7	WE97.G3.M13 WE97.G3.T7	**SL-064**	
SL-066	SL066m13 SL066t7	WE97.H3.M13 WE97.H3.T7	**SL-016**	
SL-067	SL067m13 SL067t7 SL067t7	H1 H1 WE97.A4.T7	**SL-067**	HUMKIAAP - KIAA0095 gene
SL-068	SL068m13 SL068t7	WE97.B4.M13 WE97.B4.T7	**SL-068**	
SL-069	SL069m13 SL069t7	WE97.C4.M13 WE97.C4.T7	**SL-069**	
SL-071	SL071m13 SL071t7	WE97.D4.M13 WE97.D4.T7	**SL-071**	
SL-072	SL072m13 SL072t7	WE97.E4.M13 WE97.E4.T7	**SL-015**	HSU90336 Human PEG3 mRNA AB006625 KIAA0287
SL-074	SL074m13 SL074t7	WE97.F4.M13 WE97.F4.T7	**SL-074**	
SL-075	SL075m13 SL075t7	WE97.G4.M13 WE97.G4.T7	**SL-075**	
SL-076	SL076m13 SL076t7	WE97.H4.M13 WE97.H4.T7	**SL-076**	
SL-077	SL077m13 SL077t7	WE97.A5.M13 WE97.A5.T7	**SL-077**	
SL-078 SL-081	SL078m13 SL078m13 SL078t7 SL081m13 SL081t7	A2 WE97.B5.M13 A2 WE97.E5.M13 WE97.E5.T7	**SL-016** **SL-003**	 BAC clone (with Alu) AB006625 - KIAA0287 gene
SL-083	SL083m13 SL083t7	WE97.G5.M13 WE97.G5.T7	**SL-083**	
SL-084	SL084m13 SL084t7	WE97.H5.M13 WE97.H5.T7	**SL-084**	(HS295C6 Human DNA sequence)

TABLE 1 PATENT

SL-085 SL-086	SL085m13 SL086m13 SL086t7	WE97.A6.M13 WE97.B6.M13 WE97.B6.T7	**SL-085** **SL-086**	
SL-087	SL087m13 SL087t7	WE97.C6.M13 WE97.C6.T7	**SL-087**	EST and Mus musculus ras-GTPase-activating protein
SL-088	SL088m13 SL088t7	WE97.D6.M13 WE97.D6.T7	**SL-015**	HSU90336 Human PEG3 & AB006625 - KIAA0287 gene
SL-089	SL089m13 SL089t7	WE97.E6.M13 WE97.E6.T7	**SL-089**	
SL-090 SL-091	SL090m13 SL090t7 SL091m13 SL091t7	D2 D2 WE97.G6.M13 WE97.G6.T7	**SL-090** **SL-091**	
SL-092	SL092m13 SL092t7	WE97.H6.M13 WE97.H6.T7	**SL-092**	HUMPRKACB testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform)
SL-093 SL-094	SL093m13 SL093t7 SL094m13 SL094t7	E2 E2 WE97.B7.M13 WE97.B7.T7	**SL-008** **SL-094**	HUMLPLSTN2 L-plastin gene
SL-095	SL095m13 SL095t7	WE97.C7.M13 WE97.C7.T7	**SL-003**	AB006625 - KIAA0287
SL-096	SL096m13 SL096t7	WE97.D7.M13 WE97.D7.T7	**SL-096**	
SL-097	SL097m13 SL097t7		**SL-071**	
SL-098	SL098m13 SL098t7		**SL-098**	
SL-099	SL099m13 SL099t7		**SL-016**	
SL-100	SL100m13 SL100m13 SL100t7 SL100t7	F2 F2	**SL-085**	 SL100m13 Alu - 2e-71
SL-102	SL102m13 SL102t7		**SL-102**	HSRPL32 ribosomal protein L32
SL-103	SL103m13 SL103t7		**SL-103**	
SL-105	SL105m13 SL105t7		**SL-105**	
SL-106	SL106m13 SL106t7		**SL-106**	
SL-107	SL107m13 SL107t7		**SL-016?**	 SL107m13 -Alu - 2e-78
SL-110	SL110m13		**SL-003**	AB006625- KIAA0287 gene

TABLE 1 PATENT

	SL110t7			
SL-111	SL111m13 SL111t7		**SL-111**	
SL-112	SL112m13 SL112t7		**SL-112**	
SL-115	SL115m13 SL115t7		**SL-115**	D86322 - calmegin
SL-116	SL116m13 SL116t7		**SL-116**	
SL-117	SL117m13 SL117t7		**SL-117**	HUMNUMB23 = HUMNPM Human nucleolar protein (B23) or Human nucleophosmin
SL-118	SL118m13 SL118t7		**SL-118**	
SL-119	SL119m13 SL119t7		**SL-119**	
SL-120	SL120m13 SL120t7		**SL-046**	
SL-121	SL121m13 SL121t7		**SL-016**	
SL-122	SL122m13 SL122t7		**SL-122**	HUMPRKACB testis-specific cAMP-dependent protein kinase catalytic subunit (C-beta isoform)
SL-124	SL124m13 SL124t7		**SL-016**	
SL-125	SL125m13 SL125t7		**SL-125**	HSU19145 GAGE-4 (US 5.648.226)
SL-127	SL127m13 SL127t7		**SL-127**	
SL-128	SL128m13 SL128t7		**SL-005**	
SL-130	SL130m13 SL130t7		**SL-130**	
SL-132	SL132m13 SL132t7		**SL-011**	HSU10685 MAGE-10 gene (US 5.612.201)
SL-134	SL134m13 SL134t7		**SL-134**	HSC70P Hsc 70 pseudogene (Heat Shock protein)
SL-135	SL135m13 SL135t7		**SL-135**	
SL-138	SL138m13 SL138t7		**SL-051**	
SL-139	SL139m13 SL139t7		**SL-139**	Homo sapiens cosmid
SL-142	SL142m13 SL142t7		**SL-005**	

TABLE 1

SL-143	SL143m13 SL143t7		**SL-143**	Genomic clone AC003978
SL-144	SL144m13 SL144t7		**SL-144**	E= 3-81
SL-145 SL-146	SL145m13 SL146m13 SL146t7	 WE97.E7.M13 WE97.E7.T7	**SL-003** **SL-146**	AB006625- KIAA0287 gene
SL-147 SL-148	SL147m13 SL147m13 SL147t7 SL148m13 SL148t7	G2 WE97.F7.M13 G2 WE97.G7.M13 WE97.G7.T7	**SL-147** **SL-016**	(1) HSCDC2R Human cell cycle control gene CDC2 (2) HSU29091 selenium-binding
SL-149 SL-150 SL-151	SL149m13 SL149t7 SL150m13 SL150t7 SL151m13 SL151t7	H2 H2 A3 A3 WE97.B8.M13 WE97.B8.T7	**SL-149** **SL-150** **SL-151**	"Human DNA sequence" Genomic frag
SL-152	SL152m13 SL152t7	WE97.C8.M13 WE97.C8.T7	**SL-152**	
SL-153	SL153m13 SL153t7	WE97.D8.M13 WE97.D8.T7	**SL-153**	
SL-154	SL154t7	WE97.E8.T7	**SL-154**	HUMPAR5R - PAR-5 mRNA
SL-155	SL155m13 SL155t7	WE97.F8.M13 WE97.F8.T7	**SL-028**	SL155m13 - EST only in Mouse
SL-156	SL156m13 SL156t7	WE97.G8.M13 WE97.G8.T7	**SL-016**	
SL-157	SL157m13 SL157t7	WE97.H8.M13 WE97.H8.T7	**SL-157**	
SL-158	SL158m13 SL158t7	WE97.A9.M13 WE97.A9.T7	**SL-011**	HSU10685 MAGE-10 gene (US 5.612.201)
SL-159	SL159m13 SL159t7	WE97.B9.M13 WE97.B9.T7	**SL-159**	Chromosome 11 pac
SL-160	SL160m13 SL160t7	WE97.C9.M13 WE97.C9.T7	**SL-051**	
SL-161	SL161m13 SL161t7	WE97.D9.M13 WE97.D9.T7	**SL-161**	HUMP65 phosphoprotein (p65) HUMPLASTA L-plastin gene
SL-162 SL-163	SL162m13 SL162t7 SL163m13 SL163t7	B3 B3 WE97.F9.M13 WE97.F9.T7	**SL-162** **SL-016**	HSU75330 -NCAM21
SL-164	SL164m13 SL164t7	WE97.G9.M13 WE97.G9.T7	**SL-016**	
SL-165	SL165m13 SL165t7	WE97.H9.M13 WE97.H9.T7	**SL-165**	(genomic seq)

TABLE 1 PATENT

SL-166	SL166m13 SL166t7 SL166t7	C3 C3 WE97.A10.T7	**SL-166**	
SL-167	SL167m13 SL167t7	WE97.B10.M13 WE97.B10.T7	**SL-167**	HUMLPACI09 lipoprotein-associated coagulation inhibitor (LACI) gene
SL-168	SL168m13 SL168t7	WE97.C10.M13 WE97.C10.T7	**SL-168**	
SL-169	SL169m13 SL169t7	WE97.D10.M13 WE97.D10.T7	**SL-169**	HUMNEUROF oligodendrocyte myelin glycoprotein (OMG)
SL-170	SL170m13 SL170t7	WE97.E10.M13 WE97.E10.T7	**SL-170**	
SL-171	SL171m13 SL171t7	WE97.F10.M13 WE97.F10.T7	**SL-171**	AB002374 - KIAA0376 gene
SL-172	SL172m13 SL172t7	WE97.G10.M13 WE97.G10.T7	**SL-016**	
SL-173	SL173m13 SL173t7	WE97.H10.M13 WE97.H10.T7	**SL-173**	
SL-174 SL-175	SL174m13 SL174t7 SL175m13 SL175t7	D3 D3 WE97.B11.M13 WE97.B11.T7	**SL-174** **SL-016**	
SL-176	SL176m13 SL176t7	WE97.C11.M13 WE97.C11.T7	**SL-176**	
SL-177	SL177m13 SL177t7	WE97.D11.M13 WE97.D11.T7	**SL-177**	
SL-178	SL178m13 Sl178t7	WE97.E11.M13 WE97.E11.T7	**SL-178**	Human BAC clone
SL-179	SL179m13 SL179t7	WE97.F11.M13 WE97.F11.T7	**SL-179**	
SL-181	SL181m13 SL181t7	WE97.H11.M13 WE97.H11.T7	**SL-181**	
SL-182 SL-183	SL182m13 SL182m13 SL182t7 SL183m13 SL183t7	F3 WE97.A12.M13 F3 WE97.B12.M13 WE97.B12.T7	**SL-182** **SL-046**	HUMAPEA apurinic/apyrimidinic endonuclease (HAP1h) HSHAP1MR Human HAP1 mRNA
SL-184	SL184m13 SL184t7	WE97.C12.M13 WE97.C12.T7	**SL-016**	
SL-186	SL186m13 SL186t7	WE97.D12.M13 WE97.D12.T7	**SL-186**	
SL-187	SL187m13 SL187t7	WE97.E12.M13 WE97.E12.T7	**SL-187**	
SL-188	SL188m13 SL188t7 SL188t7	G3 G3 WE97.F12.T7	**SL-188**	

TABLE 1 PATENT

SL-191	SL191m13 SL191t7	WE97.H12.M13 WE97.H12.T7	**SL-181**	
SL-192	SL192m13 SL192t7	H3 H3	**SL-192**	Human DNA sequence"
SL-193	SL193m13 SL193t7	A4 A4	**SL-193**	
SL-194	SL194m13 SL194t7	B4 B4	**SL-194**	HUMKG1DD - KIAA0098 gene
SL-195	SL195m13 SL195t7	C4 C4	**SL-195**	
SL-196	SL196m13 SL196t7	D4 D4	**SL-196**	HUMMAOAAA monoamine oxidase (MAOA)
SL-197	SL197m13 SL197t7	E4 E4	**SL-197**	
SL-198	SL198m13 SL198t7	F4 F4	**SL-198**	
SL-199	SL199m13 SL199t7	G4 G4	**SL-016**	
SL-201	SL201m13 SL201t7	A5 A5	**SL-028**	(Mouse ESTs only)
SL-202	SL202m13 SL202t7	B5 B5	**SL-202**	mitochondrial genome & ESTs(?)
SL-203	SL203m13 SL203t7	C5 C5	**SL-040**	
SL-204	SL204m13 SL204t7	D5 D5	**SL-204**	
SL-205	SL205m13 SL205t7	E5 E5	**SL-205**	
SL-206	SL206m13 SL206t7	F5 F5	**SL-015**	AB006625 - KIAA0287 gene
SL-207	SL207m13 SL207t7	G5 G5	**SL-207**	HUMFOLMES - DHFT dihydrofolate reductase gene
SL-208	SL208m13 SL208t7	H5 H5	**SL-208**	AB011165 - KIAA0593
SL-209	SL209m13 Sl209t7	A6 A6	**SL-209**	
	batch 1			
	batch 2			
	batch 3			
	batch 4			

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
10-sl16-1t7	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>
18-sl16-2t7	<NONE>	<NONE>	<NONE>	MT_PLEPL	METALLOTHIONEIN (MT)>PIR2:S30567 metallothionein - plaice>GP:PPMMET_1 P;platessa mRNA for metallothionein	0.32
22sl4	AC004601	***SEQUENCING IN PROGRESS ***Human Chromosome 11p14.3 PAC clone pDJ939m16; HTGS phase 1,3 unordered pieces.	0.016	VP1_BPCHP	PROTEIN VP1(ORF1)	1.0
27sl9	AF001549	Homo sapiens chromosome 16 BAC clone CIT987SK-270G1 complete sequence	7.2e-28	ALU6_HUMAN	!!!! ALU SUBFAMILY SP WARNING ENTRY !!!!	3.5e--07
32sl13	AF006259	Homo sapiens Rad51-interacting protein mRNA, complete cds.	1.2e-09	MMU93583_1	Mus musculus RAD51-binding proptein RAB22 mRNA, complete cds	1.2e-13
39-sl3-1m13	U07056	Human prostatic acid phosphatase (ACPP) gene, exon 1.	1.1e-09	MMU41047_1	Mus musculus transcription factor Genesis mRNA, complete cds; A winged helix retinoic-acid hepatocyte nuclear factor 3/forkhead transcription factor; HNF3/FH transcription factor	0.36
47-sl15-2t7	I08056	Sequence 2 from Patent EP 0272928.	4.8e-52	<NONE>	<NONE>	<NONE>
sl102m13	AC004453	Homo sapiens PAC clone DJ0844F09 from 7p12-p13, complete sequence.	5.0e-50	SIK1_YEAST	SIK1 PROTEIN>PIR2:S48550 hypothetical protein YLR197w - yeast (Saccharomyces cerevisiae)>GP:SCU20237_1 Sacchoaromyces cerevisiae Sik1p (SIK1) gene, complete cds; Possible microtubule binding protein; similar to GenBank Accession Number U14913	2.7e-09
sl103m13	AC002542	Human BAC clone RG114A06 from 7q31, complete sequence.	0.78	MUSIGHV01B_1	Mouse CBA/J Ig heavy chain V1 region pseudogene, 5' end; Ig heavy chain precursor; Possible pseudogene	0.30
sl103t7	AC002542	Human BAC clone RG114A06 from 7q31, complete sequence.	7.0e-11	MUSIGHV01B_1	Mouse CBA/J Ig heavy chain V1 region pseudogene, 5' end; Ig heavy chain precursor; Possible pseudogene	0.25

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
sl106t7	148979	Sequence 6 from patent US 5627054.	4.3e-39	Y694_METJA	HYPOTHETICAL PROTEIN MJ0694>PIR2:F64386 hypothetical protein MJ0694 - Methanococcus jannaschii>GP:U67516_8 Methanococcus jannaschii section 58 of 150 of the complete genome; Conserved hypothetical protein; Similar to SP:Q12499 PID:1420682PI	1.5e-08
sl107t7.fsa	AL021395	Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 269M15; HTGS phase 1.	2.6e-07	ALU4_HUMAN	!!!! ALU SUBFAMILY SB2 WARNING ENTRY !!!!	0.45
sl124t7	B3134	HS-1008-A2-A05-MF.abi CIT Human Genomic Sperm Library C Homo sapiens genomic clone Plate=CT 330 Col=10 Row=A, genomic survey sequence.	1.0e-55	ALU7_HUMAN	!!!! ALU SUBFAMILY SQ WARNING ENTRY !!!!	1.2e-14
sl127t7	Z83818	Human DNA sequence from PAC 138A5 on chromosome X contains ESTs.	2.8e-16	YA3A_SCHPO	HYPOTHETICAL TRP-ASP REPEATS CONTAINING PROTEIN C18B11.10 IN CHROMOSOME I>PIR2:S58306 hypothetical protein spac18b11.10 - fission yeast (Schizosaccharomyces pombe)>GP:SPAC18B11_10 S;pombe chromosome I cosmid c18B11; Unknown; SPAC18B11;10, le	0.97
sl135m13	AC003959	Homo sapiens chromosome 5, P1 clone 1029A7 (LBNL H15), complete sequence.	1.8e 57	AC004416_5	Homo sapiens BAC clone RG013N12 from 7q31;2, complete sequence; H_RG013N12;gw;1335199;a	0.016
sl135t7	AC003044	Human PAC clone DJ055C04 from 7p15-7p21, complete sequence.	3.8e-25	ATTS0669_1	A; thaliana transcribed sequence; clone VDV28-22792, 3' end; similar to nonspecific lipid-transfer protein precursor	0.77
sl144m13	AC003684	Homo sapiens; HTGS phase 1, 53 unordered pieces.	2.2e-10	<NONE>	<NONE>	<NONE>
sl144t7	AC004089	*** SEQUENCING IN PROGRESS *** Human Chromosome 7 BAC Clone 155b01; HTGS phase 1, 11 unordered pieces.	0.25	<NONE>	<NONE>	<NONE>

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL149m13 WE97.H7.M13	M87923	Human carcinoma cell-derived Alu RNA transcript, clone CE12.	7.2e-55	ALU2_HUMAN	!!!! ALU SUBFAMILY SB WARNING ENTRY !!!!	4.7e-17
SL150m13 WE 97.A8.M13	AF019122	Homo sapiens DNA polymerase gamma (POLG) gene, nuclear gene encoding mitochondrial protein, partial sequence, genomic survey sequence.	5.5e-07	<NONE>	<NONE>	<NONE>
SL152m13	AF022186	Cyanidium caldarium RK1 chloroplast sequence	0.11	<NONE>	<NONE>	<NONE>
SL152t7	AC002524	Homo sapiens Xp22 BAC GSHB-257G1 (Genome Systems BAC Library) complete sequence.	3.5e-28	F40201	artifact-warning sequence (translated ALU class F) - human	1.2e-05
SL153m13	U29895	Human 4-hydroxyphenylpyruvate-dioxygenase gene, complete cds.	4.4e-15	C40201	artifact-warning sequence (translated ALU class C) - human	0.49
SL153t7	U29895	Human 4-hydroxyphenylpyruvate-dioxygenase gene, complete cds.	5.1e-09	A46010	X-linked retinopathy protein (C-terminal, clone XEH 8c) - human (fragment)>GP:S58722_1 X-linked retinopathy protein {3' region, clone XEH;8c} [human, mRNA Partial, 390 nt]; This sequence comes from Fig; 5	0.070
SL155m13	Z99280	Caenorhabditis elegans cosmid Y7A9C, complete sequence.	0.016	POLG_PRSVH	GENOME POLYPROTEIN (CONTAINS: N-TERMINAL PROTEIN; HELPER COMPONENT PROTEINASE (EC 3.4.22.-) (HC-PRO); 42-50 KD PROTEIN; CYTOPLASMIC INCLUSION PROTEIN (CI); 6 KD PROTEIN; NUCLEAR INCLUSION PROTEIN A (NI-A) (EC 3.4.22.-) (49K PROTEINASE) (49	1.0
SL157m13	U91321	Human Chromosome 16 BAC clone CIT987SK-A-363E6, complete sequence.	6.0e-26	ALU1_HUMAN	!!!! ALU SUBFAMILY J WARNING ENTRY !!!!	4.5e-11

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL16017	<NONE>	<NONE>	<NONE>	CA34_HUMAN	PROCOLLAGEN ALPHA 3(IV) CHAIN PRECURSOR>PIR1:CGHU3B collagen alpha 3(IV) chain precursor, long splice form - human>GPN:HSCOL4A3_1 H.sapiens COL4A3 mRNA; Type IV collagen alpha 3 chain>GP:HSCOL4A3_1 H.sapiens COL4A3 mRNA; Type IV collagen alp	0.99
SL162t7 WE97.E9.T7	X58263	Mouse microsatellite marker DNA D4SMH6b, 4.	0.0029	PRF1_LYCES	36.4 KD PROLINE-RICH PROTEIN>PIR2:S19129 proline-rich protein TPRP-F1 - tomato>GP:LETPRPF1_1 L. esculentum TPRP-F1 gene for a proline rich protein	0.99
SL169t7	AC004687	*** SEQUENCING IN PROGRESS *** Homo sapiens chromosome 17, clone hRPC.1171_I_10; HTGS phase 1, 4 unordered pieces.	2.5e-11	<NONE>	<NONE>	<NONE>
SL174t7	<NONE>	<NONE>	<NONE>	A54895	mucin2, intestinal/tracheal - rat (fragment)	0.13
SL176m13	Z73424	Caenorhabditis elegans cosmid C44B9, complete sequence	0.00084	<NONE>	<NONE>	<NONE>
SL176t7	Z83119	Caenorhabditis elegans cosmid R05H10, complete sequence.	0.38	<NONE>	<NONE>	<NONE>
SL177m13	AL022279	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y43F11; HTGS phase 1.	0.00064	ANX7_BOVIN	ANNEXIN VII (SYNEXIN) (FRAGMENT)>PIR2:A27695 synexin - bovine (fragment)	0.0018
SL177t7	AC002416	Human Chromosome X, complete sequence.	1.8e-17	<NONE>	<NONE>	<NONE>
SL179m13	AF039052	Caenorhabditis elegans cosmid T22D1.	0.030	CMU23045_8	Cepaena nemoralis complete mitochondrial genome; ATPase subunit 8>GP:CMU23045_8 Cepaea nemoralis complete mitochondrial genome; ATPase subunit 8	0.98

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL179t7	L41631	Mus musculus glucokinase gene, complete cds.	0.017	<NONE>	<NONE>	<NONE>
SL181m13	Z98867	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1.	0.017	PS0245	hypothetical protein (cpeG4 region) - Anabaena sp. (strain PCC 7120) (fragment)>GP:ANARODCORA_6 Anabaena sp; cpeF gene, 3' end; cpeG1, cpeG2, cpeG3, and cpeG4 genes, complete cds; and unknown ORF, 3' end	0.99
SL181t7	Z98867	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1.	0.018	PS0245	hypothetical protein (cpeG4 region) - Anabaena sp. (strain PCC 7120) (fragment)>GP:ANARODCORA_6 Anabaena sp; cpeF gene, 3' end; cpeG1, cpeG2, cpeG3, and cpeG4 genes, complete cds; and unknown ORF, 3' end	0.99
SL191m13	Z98867	Caenorhabditis elegans DNA *** SEQUENCING IN PROGRESS *** from clone Y52B11; HTGS phase 1.	0.019	<NONE>	<NONE>	<NONE>
SL195m13	AC004626	*** SEQUENCING IN PROGRESS *** Homo sapiens chromosome #16q12.1+16q22/23+1q11/12 BAC clone CIT987SK-A-427H10; HTGS phase 1, 15 unordered pieces.	0.050	HSU55091_1	Human isolate HR015 T cell receptor V-beta complementarity determining region 3 mRNA, partial cds	1.0
SL195t7	AC004626	*** SEQUENCING IN PROGRESS *** Homo sapiens chromosome #16q12.1+16q22/23+1q11/12 BAC clone CIT987SK-A-427H10; HTGS phase 1, 15 unordered pieces.	0.053	S54078	probable membrane protein YPR056w - yeast (Saccharomyces cerevisiae)>GP:SC9499X_12 S;cerevisiae chromosome XVI cosmid 9499; Unknown; UP9499; 12, unknown, len:338, CAI: 0; 12, similar to S44455, transcription factor BTF2 chain p34, (29;3% identit	0.64

TABLE 2

PATENT

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL197m13	AF003134	Caenorhabditis elegans cosmid ZC581.	0.99	<NONE>	<NONE>	<NONE>
SL197t7	U43400	Human herpesvirus-7 (HHV7) JI, complete virion genome.	0.99	<NONE>	<NONE>	<NONE>
SL19t7	V00073	Sindbis virus sequence complementary to 26S messenger RNA.	3.2e-09	<NONE>	<NONE>	<NONE>
SL201m13	AB001684	Chlorella vulgaris C-27 chloroplast DNA, complete sequence.	0.0013	SIU05069_1	Simian immunodeficiency virus SIVRhE543 clone 5-4 envelope glycoprotein (env) gene, V1 region, partial cds	1.0
SL201t7	AB001684	Chlorella vulgaris C-27 chloroplast DNA, complete sequence.	0.0014	HUMLTBP_1	Homo sapiens (clone H 4;4) latent transforming growth factor- beta binging protein (LTBP-1L) gene, partial cds; Latent transforming growth factor-binding protein	1.0
SL204m13	Z49910	Caenorhabditis elegans cosmid F44G4, complete sequence.	1.0e-11	CEF44G4_1	Caenorhabditis elegans cosmid F44G4, complete sequence; F44G4;1; Similarity to 35;1KD hypothetical yeast protein (Swiss Prot accession number P38805); cDNA EST CEMSE65F comes from this	5.6e-72
SL204t7	Z49910	Caenorhabditis elegans cosmid F44G4, complete sequence.	9.3e-12	CEF44G4_1	Caenorhabditis elegans cosmid F44G4, complete sequence; F44G4;1; Similarity to 35;1KD hypothetical yeast protein (Swiss Prot accession number P38805); cDNA EST CEMSE65F comes from this	2.3e-71
SL28m13	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>
SL28t7	Z84469	Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 390O13; HTGS phase 1.	2.9e-53	<NONE>	<NONE>	<NONE>

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL29m13	AC004465	Homo sapiens 12q24 PAC RPC13-363118 (Roswell Park Cancer Institute Human PAC library) complete sequence.	3.3e-09	MCRA_METFE	METHYL-COENZYME M REDUCTASE ALPHA SUBUNIT (EC 1.8.-.-)>GP:MEFMCRC_5 M;fervidus methyl coenzyme M reductase component C genes mcrA, mcrB, mcrC, mcrD, and mcrG, complete cds; Methyl coenzyme M reductase alpha subunit	0.95
SL29t7	AC004465	Homo sapiens 12q24 PAC RPC13-363118 (Roswell Park Cancer Institute Human PAC library) complete sequence.	0.97	MCRA_METFE	METHYL-COENZYME M REDUCTASE ALPHA SUBUNIT (EC 1.8.-.-)>GP:MEFMCRC_5 M;fervidus methyl coenzyme M reductase component C genes mcrA, mcrB, mcrC, mcrD, and mcrG, complete cds; Methyl coenzyme M reductase alpha subunit	0.97
SL4M13	D42085	Human mRNA for KIAA0095 gene, complete cds.	2.0e-27	HUMKIAAP_1	Human mRNA for KIAA0095 gene, complete cds; KIAA0095 gene is related to S;cerevisiae NIC96 gene	3.6e-12
SL54m13	Z68694	Human DNA sequence from cosmid cU177E8, between markers DXS366 and DXS87 on chromosome X.	4.9e-28	HUMF8L1A_1	Human factor VIII gene L1 element insertion DNA; Unknown protein; ORF; putative	1.2e-12
SL61t7	AB001684	Chlorella vulgaris C-27 chloroplast DNA, complete sequence.	0.00083	AF004841_1	Homo sapiens CDO mRNA, complete cds; Immunoglobulin superfamily member; contains fibronectin type III-like domain	1.0
SL62t7	AC004153	*** SEQUENCING IN PROGRESS *** Plasmodium falciparum 3D7 chromosome 12 PFYAC812 genomic sequence; HTGS phase 1, 26 unordered pieces.	1.0	<NONE>	<NONE>	<NONE>
SL68m13	AC004157	*** SEQUENCING IN PROGRESS *** Plasmodium falciparum 3D7 chromosome 12 PFYAC293 genomic sequence; HTGS phase 1, 18 unordered pieces.	0.00071	<NONE>	<NONE>	<NONE>

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL68t7	AJ226619	Ciona intestinalis genomic fragment, clone 17H6, genomic survey sequence	0.064	<NONE>	<NONE>	<NONE>
SL69m13.fsa	Z22789	H.sapiens CA/GT repeat polymorphism sequence.	1.9e-22	AE001779_2	Borrelia burgdorferi (section 65 of 70) of the complete genome; Competence protein F, putative; Similar to GB:M59751 SP:P31773 PID:1573409 percent identify: 27;00; identified by sequence	1.0
SL69t7	AL010138	Plasmodium falciparum DNA *** SEQUENCING IN PROGRESS *** from contig 3-66, complete sequence.	0.21	AE001779_2	Borrelia burgdorferi (section 65 of 70) of the complete genome; Competence protein F, putative; Similar to GB:M59751 SP:P31773 PID:1573409 percent identity: 27;00; identified by sequence	1.0
SL75m13	AC002536	Human Chromosome 11 pac pDJ1075f20, complete sequence.	1.0	BTRNAT3_1	B;taurus mRNA for complete thrombospondin	0.0074
SL77t7	AF012886	Buchnera aphidicola UDP-N-acetylmuramate; L-alanine ligase (murC157), D-alanine; D-alanine ligase (ddlB), cell division protein (ftsA), cell septation protein (ftsZ), and pls genes, complete cds.	0.40	<NONE>	<NONE>	<NONE>
SL86m13	Z69790	Caenorhabditis elegans cosmid F33C8, complete sequence.	0.020	<NONE>	<NONE>	<NONE>
SL86t7	U39368	Acanthonevra sp. 16S ribosomal RNA gene, mitochondrial gene encoding mitochondrial RNA, partial sequence.	0.054	<NONE>	<NONE>	<NONE>
SL90m13	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>	<NONE>
SL94m13	X95276	P .falciparum complete gene map of plastid-like DNA (IR-B).	0.0096	SHFORF_1	Shigella sonnei DNA for 26 ORFs, complete cds; ORF1	0.15

PATENT

TABLE 2

	BlastN vs. Gb (nearest neighbor)			BlastX vs. NRPdb (nearest neighbor)		
Seq. Name and/or Other Seq. Name.	Accession	Hit Description	P(V)	Accession	Hit Description	P(V)
SL9417	AL022313	Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone 1119A7; HTGS phase 1.	6.0e-18	A46010	X-linked reteinopathy protein (C-terminal, clone XEH.8c) - human (fragment)>GP:S58722_1 X-linked retinopathy protein {3' region, clone XEH;8c} [human, mRNA Partial, 390 nt]; This sequence comes from Fig; 5	5.7e-07

CLAIMS

WE CLAIM:

1. A method of diagnosing cancer, tumor progression, hyperproliferative cell growth or accompanying biological and physical manifestations comprising:

(a) providing a polynucleotide probe that comprises a sequence capable of hybridizing to any one of the sequences shown in SEQ ID NO:1-339 or complement thereof;

(b) contacting a biological sample for diagnosis with said probe under hybridizing conditions that permit formation of a duplex; and

(c) determining the presence of said duplex.

2. The method of claim 1, wherein said polynucleotide probe comprises at least eight contiguous nucleotides of any of SEQ ID NO:1-339 or complement thereof.

3. The method of claim 2, wherein said polynucleotide probe comprises 8 contiguous nucleotides of the sequences of the clones selected from the group consisting of SL-5, SL-6, SL-9, SL-11, SL-13, SL-68, SL-69, SL-86, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, SL-177, SL-195, and SL-197.

4. A method of diagnosing cancer, tumor progression, or hyper-proliferative cell growth comprising:

(a) providing an antibody capable of binding to a polypeptide encoded by any one of SEQ ID NO:1-339 or complement thereof;

(b) contacting a biological sample for diagnosis with said antibody under binding conditions that permit formation of an antibody-polypeptide complex; and

(c) determining the presence of said complex.

5. The method of claim 4, wherein said antibody is capable of binding to a polypeptide comprising at least six contiguous amino acid of a polypeptide encoded by any one of SEQ ID NO:1-339 or complement thereof.

6. The method of claim 5, wherein said polypeptide comprises at least six contiguous amino acids of a polypeptide encoded by any one the sequences of the clones selected from the group consisting of SL-5, SL-6, SL-9, SL-11, SL-13, SL-68, SL-69, SL-86, SL-90, SL-100, SL-107, SL-124, SL-135, SL-139, SL-143, SL-152, SL-153, SL-173, SL-177, SL-195, and SL-197.

7. A diagnostic kit comprising:

(a) a diagnostic reagent comprising a polynucleotide probe that comprises a sequence capable of hybridizing to any one of SEQ ID NO:339 or complement thereof when said sequence is present in a test biological sample;

(b) a normal biological sample; and

(c) instructions for detecting differences that exist between the levels of duplexes in said test biological sample as compared to said normal biological sample.

8. A method of treating a mammal with cancer, tumor progression, hyperproliferative cell growth or accompanying biological and physical manifestations, said method comprising administering to said mammal a composition that comprises a therapeutically effective amount of a polynucleotide comprising a sequence capable of hybridizing under stringent conditions to any one of SEQ ID NO:1-339 or complement thereof.

9. The method of claim 8, wherein said polynucleotide comprises at least eight contiguous nucleotides of any of SEQ ID NO:1-339 or complement thereof.

10. The method of claim 9, wherein said polynucleotide is an antisense construct.

11. The method of claim 9, wherein said polynucleotide is a ribozyme construct.

12. An isolated polynucleotide selected from the group consisting of:

(a) a polynucleotide comprising the nucleotide sequence of any one of SEQ ID NO:2, 5, 49, 50, 99, 100, 115, 116, 118, 130, 131, 140, 144, 145, 146, 157, 158, 159, 163, 164, 165, 166, 177, 178, 180, 211, 212, 213, 218, 219, 220, 221, 229, 232, 233, 242, 243, 248, 249, 254, 256, 257, 259, 272, 273, 277, 288, 289, 292, 293, 316, 317, and 330;

(b) a polynucleotide encoding a variant of the polypeptide encoded by (a); and

(c) a polynucleotide encoding a protein expressed by a polynucleotide having the sequence of at least one of sequences of (a).

13. A vector comprising the polynucleotide of claim 12.

14. A host cell comprising the vector of claim 13.

15. A composition comprising a polypeptide, wherein the polypeptide is selected from the group consisting of:

(a) a polypeptide encoded by any one of the polynucleotides of claim 12, and

(b) a variant of the polypeptide of (a).

1/5

Sequence Range: 1 to 1383

```
         10          20          30          40          50          60
TTA CTC ACT ATA GGG CTC GAG CGG CCG CCC GGG CAG GTG TAA AAA TAA AAT GAC AGT TTG AAC ATA
AAT GAG TGA TAT CCC GAG CTC GCC GGC GGG CCC GTC CAC ATT TTT ATT TTA CTG TCA AAC TTG TAT
    <E   S   Y   P   E   L   P   R   G   P   L   H   L   F   L   I   V   T   Q   V   Y

  70          80          90         100         110         120         130
CAA AAC CCA CCC CAT TCC TAT AGA GCC TAG TAC TAC ACT ACC CCC TCC CAA CTT TAG CCT CCA CAT
GTT TTG GGT GGG GTA AGG ATA TCT CGG ATC ATG ATG TGA TGG GGG AGG GTT GAA ATC GGA GGT GTA
<L   V   W   G   M   G   I   S   G   L   V   V   S   G   G   G   L   K   L   R   W   M

     140         150         160         170         180         190
ATA GTA ATG TGC TTG GAA CAC AAA AAA CAC TTC ATA AAT TGT GCT GAA TGA AAT CAT TTC CAT GAG
TAT CAT TAC ACG AAC CTT GTG TTT TTT GTG AAG TAT TTA ACA CGA CTT ACT TTA GTA AAG GTA CTC
<Y   Y   H   A   Q   F   V   F   F   V   E   Y   I   T   S   F   S   I   M   E   M

200         210         220         230         240         250         260
TGT TTA TGG ATT TTG AGT TCA TTT GTA CCT TTT ACC TAA AAT TCT AGC CAC TTT AAT TTG GAG AGT
ACA AAT ACC TAA AAC TCA AGT AAA CAT GGA AAA TGG ATT TTA AGA TCG GTG AAA TTA AAC CTC TCA

    270         280         290         300         310         320         330
TTC CAG AGC AAA GGA CCT TTT ACC TAA AAT TCT AGC CAC TTT AAT TTG GAG AGT TTC CAG AGC AAA
AAG GTC TCG TTT CCT GGA AAA TGG ATT TTA AGA TCG GTG AAA TTA AAC CTC TCA AAG GTC TCG TTT

         340         350         360         370         380         390
GGG CAC AGA TCC CAG GCA TAA CAA CGC TTT GCG TAT ACA GCA ACC AAT ATC TTG TCA ACC CAA GAA
CCC GTG TCT AGG GTC CGT ATT GTT GCG AAA CGC ATA TGT CGT TGG TTA TAG AAC AGT TGG GTT CTT

  400         410         420         430         440         450         460
AGT TCC TCC ATT GAT ACC TAG TAG AAA TAG CCC AGT TTT TAA AGT CCT CAA AAC TGT AAC AAA TTA
TCA AGG AGG TAA CTA TGG ATC ATC TTT ATC GGG TCA AAA ATT TCA GGA GTT TTG ACA TTG TTT AAT

     470         480         490         500         510         520
CTT GTT TTT AAA ATT TAA CTT AAA TTA ATA CAA TCA GAT TTT TGT GTT ATT TGG GTA TTA GAG TAT
GAA CAA AAA TTT TAA ATT GAA TTT AAT TAT GTT AGT CTA AAA ACA CAA TAA ACC CAT AAT CTC ATA

530         540         550         560         570         580         590
GTT AAA GCA CAT ATA TCC CAG AGA CAT AGA GTT TCC GTT TCA AAA AGT CAT GCA TTC ATG TGT GCT
CAA TTT CGT GTA TAT AGG GTC TCT GTA TCT CAA AGG CAA AGT TTT TCA GTA CGT AAG TAC ACA CGA

    600         610         620         630         640         650         660
AAT GAC AAT CCT ATC CTG ACC CGC TAT GTG ACT TGT ATC TCT AAA CCA TAG GCT TTC CTG AAT TTT
TTA CTG TTA GGA TAG GAC TGG GCG ATA CAC TGA ACA TAG AGA TTT GGT ATC CGA AAG GAC TTA AAA

         670         680         690         700         710         720
ATC TGT TAA TTT AAC CCT GAT TTC TCA GCA GCA GCT TCT CTT TGT AAA TAG ACT TGC CTC TTC TGT
TAG ACA ATT AAA TTG GGA CTA AAG AGT CGT CGT CGA AGA GAA ACA TTT ATC TGA ACG GAG AAG ACA

  730         740         750         760         770         780         790
GTC TGA CCT CTG CTC CTC ATA ATC AGA TTA ACT CAG ATA AAG CTG CTT CAG GGA AGA GGT CAA AAC
CAG ACT GGA GAC GAG GAG TAT TAG TCT AAT TGA GTC TAT TTC GAC GAA GTC CCT TCT CCA GTT TTG
```

FIG. 1A

800 810 820 830 840 850
CGT TGC CAA AAA TAG TAG TTG CCC TAC TTC AGT CTA TTT TCA ACA GAG TAG CCA GGA GAT CCT GTT
GCA ACG GTT TTT ATC ATC AAC GGG ATG AAG TCA GAT AAA AGT TGT CTC ATC GGT CCT CTA GGA CAA

860 870 880 890 900 910 920
CAC ACC AAA GTC CAA TCA GCC CTA CTG TTA GCA CTC TGC TCA CAA GCC TCC AGT GGC TTC CGA CCT
GTG TGG TTT CAG GTT AGT CGG GAT GAC AAT CGT GAG ACG AGT GTT CGG AGG TCA CCG AAG GCT GGA

930 940 950 960 970 980 990
CAC TCA CAG TAA AAG CCA AGT CAT CCT TTA GCC TAT GAT GTC CTA CAT GAT TTG AAT TCC CTT CCA
GTG AGT GTC ATT TTC GGT TCA GTA GGA AAT CGG ATA CTA CAG GAT GTA CTA AAC TTA AGG GAA GGT

1000 1010 1020 1030 1040 1050
TTG ATT TTT GTC ACT GAT TTT TAA AAA TCC AAA TTC ATT CTC ATA CAG CTG AAT TGT CCT CTT TGC
AAC TAA AAA CAG TGA CTA AAA ATT TTT AGG TTT AAG TAA GAG TAT GTC GAC TTA ACA GGA GAA ACG

1060 1070 1080 1090 1100 1110 1120
TTT AAG TAT GCC AGG ATT ATT TCT ACC TCA GGG CCT TTG CAC TTG ATA TTC CCT TCA CCT TTT CCA
AAA TTC ATA CGG TCC TAA TAA AGA TGG AGT CCC GGA AAC GTG AAC TAT AAG GGA AGT GGA AAA GGT

1130 1140 1150 1160 1170 1180
AGA TAG TTA TTC CCT CAC CTC AGT CAA GCC TTT ATT TAG ATG CCC CCT TCT CAT CAA GGC ATT CTC
TCT ATC AAT AAG GGA GTG GAG TCA GTT CGG AAA TAA ATC TAC GGG GGA AGA GTA GTT CCG TAA GAG

1190 1200 1210 1220 1230 1240 1250
TGA TCT CCT TAT TTA AAT GTA TGA CAC CCC TTC TTT GCT TTA CAT TTA ATC AGA ACA TGT GTC ACT
ACT AGA GGA ATA AAT TTA CAT ACT GTG GGG AAG AAA CGA AAT GTA AAT TAG TCT TGT ACA CAG TGA

1260 1270 1280 1290 1300 1310 1320
ATC TAG CAT ATA ATA CAT TTG CTT GAC CTC TTT TGT TTA CTG TCT ATG CCT CCT GAA TAC TGT GTA
TAG ATC GTA TAT TAT GTA AAC GAA CTG GAG AAA ACA AAT GAC AGA TAC GGA GGA CTT ATG ACA CAT

1330 1340 1350 1360 1370 1380
AGC TCC ACG ATA CAG GCA CTT TTC TCT ATT TCG AGC ACT GTT GTA TTA CAG AGC CTT AAA
TCG AGG TGC TAT GTC CGT GAA AAG AGA TAA AGC TCG TGA CAA CAT AAT GTC TGC GAA TTT

FIG. 1B

Sequence Range: 1 to 1815

```
          10          20          30          40          50          60
ACT TTT TGT TCA TTT TGA TTT TTG GAT AAT GCA AAA TTA TAG ATT TTT TAA AAA TTA TAT TCA AAG
AAA ACA AGT AAA ACT AAA AAC CTA TTA CGT TTT AAT ATC TAA AAA ATT TTT AAT ATA AGT TTC TTA

   70          80          90         100         110         120         130
AAT ACT GAG TGC AAG ACA ATC TTT CTA GGT TAA AAA ATA TCT TAT AAA CCT GAA TTG TCA ATT ATT
CTC ACG TTC TGT TAG AAA GAT CCA ATT TTT TAT AGA ATA TTT GGA CTT AAC AGT TAA TAA TAA CAT

        140         150         160         170         180         190
ATT GTA TCC CAG ATG TAT GGA AGT TAA TGG ATA GTC AGT AAC ATA CAG GAC TAG CAG AAG GTT TGT
TGA TGA AGG GTC TAC ATA CCT TCA ATT ACC TAT CAG TCA TTG TAT GTC CTG ATC GTC TTC CAA ACA

200         210         220         230         240         250         260
TGT TAT AGG TAA TCT GGA GAG AAG CCA GGT AAG TGG AAT TTG GGA TTT GCT GCT GTT GCC AGA AAG
ACA ATA TCC ATT AGA CCT CTC TTC GGT CCA TTC ACC TTA AAC CCT AAA CGA CGA CAA CGG TCT TTC

   270         280         290         300         310         320         330
CAG CAC AGA GAC ATG GTA AGT GGC AAG ACC CAG GTA ACT AAA ACA ACC ATG TCT TAG TCC TTT TAT
GTC GTG TCT CTG TAC CAT TCA CCG TTC TGG GTC CAT TGA TTT TGT TGG TAC AGA ATC AGG AAA ATA

        340         350         360         370         380         390
GCT GCT GTA ACA GAA TAT CAC AGA CTG AGT AAT TTA TAA TGA ACA GAA CTT TAT TTG TCT TCT GGT
CGA CGA CAT TGT CTT ATA GTG TCT GAC TCA TTA AAT ATT ACT TGT CTT GAA ATA AAC AGA AGA CCA

 400         410         420         430         440         450         460
TCT GGA GAC TGG GAA ATC TAA GAG CGT GGC ATT GAC ATA TGG TGA GGG CAT TTG TGC CTC ATC ATC
AGA CCT CTG ACC CTT TAG ATT CTC GCA CCG TAA CTG TAT ACC ACT CCC GTA AAC ACG GAG TAG TAG

        470         480         490         500         510         520
CCA TGA CAG AAG ATG GAA ATG CAA GAG AGC TCA AAA GCA AGA GAG CAA ATG GGG CCA AAC TTG CTT
GGT ACT GTC TTC TAC CTT TAC GTT CTC TCG AGT TTT CGT TCT CTC GTT TAC CCC GGT TTG AAC GAA

530         540         550         560         570         580         590
TTT ATA ACA AGC CAC TCT TGT GAT AAT GAA CCA ACT CAA ACA ATA AAG ACA TAA ATC CAT TCA TGA
AAA TAT TGT TCG GTG AGA ACA CTA TTA CTT GGT TGA GTT TGT TAT TTC TGT ATT TAG GTA AGT ACT

    600         610         620         630           640         650
GGG CAG AGC CCT CAA GGA TGA ATC ACT TCA CTT CTT A ATG GCC TCA GCT TCT AAT ACC ATC ACA
CCC GTC TCG GGA GTT CCT ACT TAG TGA AGT GAA GAA T TAC CGG AGT CGA AGA TTA TGG TAG TGT
                                                   M   A   S   A   S   N   T   I   T

660         670         680         690         700         710         720
ATA GTA ATT CAG TTT CAA CAT GGG TTT TAT AGG GAC GTT GGA ACC ACA GCA AAC TGT AAC CAT TTT
TAT CAT TAA GTC AAA GTT GGA CCC AAA ATA TCC CTG CAA CCT TGG TGT CGT TTG ACA TTG GTA AAA
 I   V   I   Q   F   Q   H   G   F   Y   R   D   V   G   T   T   A   N   C   N   H   F>

   730         740         750         760         770         780         790
GAT TTC CTT ATT TGC ACC ATT TTA AAA AAA CCT ATT TAT TTA ACG ACT GTT TAT TCA GTG CCT ATT
CTA AAG GAA TAA ACG TGG TAA AAT TTT TTT GGA TAA ATA AAT TGC TGA CAA ATA AGT CAC GGA TAA
 D   F   L   I   C   T   I   L   K   K   P   I   Y   L   T   T   V   Y   S   V   P   I>

        800         810         820         830         840         850
CTG TTG TGT TGG GGA CTA GAG GTA ATT ACA AAG GGA ATA AGA CAA ACA GTC ACC CAC TCT GGT GAT
GAC AAC ACA ACC CCT GAT CTC CAT TAA TGT TTC CCT TAT TCT GTT TGT CAG TGG GTG AGA CCA CTA
 L   L   C   W   G   L   E   V   I   T   K   G   I   R   Q   T   V   T   H   S   G   D>
```

FIG. 2A

```
860         870         880         890         900         910         920
GCT TCC CTT ATC TTC ATA ATG CAT TTG ATC CTG TG ATT CTT TGG CAC ATG AGT CCA TTG CAT CTT
CGA AGG GAA TAG AAG TAT TAC GTA AAC TAG GAC AC TAA GAA ACC GTG TAC TCA GGT AAC GTA GAA
 A   S   L   I   F   I   M   H   L   I   L>

        930         940         950         960         970         980
GCA TAT TAG TGT CCA GTA AGT TTT TCC TGA CCA ATT GAT AAT ATA GAT ATA CAT TGG TAG CAG TTT
CGT ATA ATC ACA GGT CAT TCA AAA AGG ACT GGT TAA CTA TTA TAT CTA TAT GTA ACC ATC GTC AAA

990         1000        1010        1020        1030        1040        1050
TGT GTA TAT TTT TAT AGT TAG ATG TTG TTG GCA CAT GTG ACT TGT GTC TCA GAA AAA TAC AGA AAA
ACA CAT ATA AAA ATA TCA ATC TAC AAC AAC CGT GTA CAC TGA ACA CAG AGT CTT TTT ATG TCT TTT

    1060        1070        1080        1090        1100        1110
TGG TTA AAG ACA GGA GGA TAC TAC CCT GAT TTC TCT GTT CAT TAA AGA ACA GCT ATT TGG GGG GAA
ACC AAT TTC TGT CCT CCT ATG ATG GGA CTA AAG AGA CAA GTA ATT TCT TGT CGA TAA ACC CCC CTT

1120        1130        1140        1150        1160        1170        1180
  AAC CTG ATA CAA TTA TTT GAG CAT GTG GCT TAA AGA TTA GAC CTA TAA ACA ATT CAG GAG CAT
  TTG GAC TAT GTT AAT AAA CTC GTA CAC CGA ATT TCT AAT CTG GAT ATT TGT TAA GTC CTC GTA

    1190        1200        1210        1220        1230        1240
CTT CCA GCA AAC TGT GTG AGA ATT CAC AGA AAT AAA CCT GGT AGG TTT GTG CTA TGT TAT TCA CAT
GAA GGT CGT TTG ACA CAC TCT TAA GTG TCT TTA TTT GGA CCA TCC AAA CAC GAT ACA ATA AGT GTA

1250        1260        1270        1280        1290        1300        1310
GGG CTG TTA ACT CTT TTC CAT TCC TAG GTC CTT TAT TTC CCT GCC CTC CTC AAT CTC ATG CTC TTG
CCC GAC AAT TGA GAA AAG GTA AGG ATC CAG GAA ATA AAG GGA CGG GAG GAG TTA GAG TAC GAG AAC

    1320        1330        1340        1350        1360        1370
AGA TTT TTA ACT ATA TTA CTT CTT TAC AAA GTC ATC TTC AAA ATG ATT CAT TTT GGA TAG CAA
TCT AAA AAT TGA TAT AAT GAA GAA ATG TTT CAG TAG AAG TTT TAC TAA GTA AAA CCT ATC GTT
```

FIG. 2B

SL5 IMMUNOHISTOCHEMISTRY COMPARISON OF TUMOR vs. NORMAL

	1	2	3	4	5	6	7	8	9	10
A	Adrenal	Adrenal	Adrenal	Ovary	Ovary	Ovary	Ovary	Breast	Breast	Breast
Tumor	(+4)	(++4)	(+2)	(++4)	(++4)	(+4)	(++4)	na	(+4)	(+1)
NC	(-)	(-)	(-)	wp	(-)	(-)	(-)	na	(-)	(-)
Normal	(+2)	(+2)	(+2)	(+1)	(+1)	na		(++1)	na	na
NC	(-)	(-)	(-)	(-)	(-)	na		(-)	na	na
B	Colon	Colon	Colon	Colon	Prostate	Prostate	Prostate	Prostate	Uterus	Cervical
Tumor	(++4)	(++4)	(+++4)	(+4)	(+2)	(++3)	(+3)	(++3)	(++4)	(+2)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Normal	(+2)	(+1)	(+2)	(++3)	?	(++2)	(+1)	(++2)	(+2)	(++2)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
C	Kidney	Kidney	Kidney	Kidney	Pancreas	Pancreas	Pancreas	Pancreas	Leiomyo-	Leiomyo-
Tumor	(+4)	(+4)	(+4)	(++4)	(+++4)	(++4)	(++4)	(+++4)	(+4)	(++4)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	EDG	EDG
Normal	?	?			(+1)	(+1)	(++2)	(+1)		
NC	(-)	(-)			(-)	(-)	(-)	(-)		
D	Liver	Liver	Liver	Stomach	Stomach	Stomach	Lymphoma	Lymphoma	Lymphoma	Lymphoma
Tumor	(+4)	(+4)	(++4)	(-)	na	na	(+4)	(+2)	(+2)	(+1)
NC	(-)	(-)	(-)	(-)	na	na	(-)	(-)	(-)	(-)
Normal	na	na	na	na	na	na	(+1)	(+1)	?	(-)
NC	na	na	na	na	(-)	(-)	(-)	na	(-)	(-)
E	Seminoma	Seminoma	Seminoma	Thyroid	Thyroid	Thyroid	Thyroid	Fibro-	Fibro-	Fibro-
Tumor	(+3)	(+4)	(++4)	(++4)	na	na		(+4)	(+4)	(++4)
NC	(-)	(-)	(-)	EDG	wp	EDG	EDG	(-)	(-)	(-)
Normal	(++2)	(+1)	(+2)	(+1)	(+1)	(++2)	(-)	(-)	purk(+)	(+2)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	na
F	Melanoma	Melanoma	Melanoma	Chorio-	Carcinoid	Chorio-	Basal Cell	Basal Cell	Basal Cell	Germ Cell
Tumor	(+++4)	(+4)	(+++4)	(+4)	(+4)?	(+1)	(++3)	(+3)	(+1)	(++4)
NC	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	EDG
Normal							(+1)	(++1)		(+1)
NC							(-)	(-)		(-)

Staining Intensity: -, no staining; + weak; ++ medium; +++ strong staining
Staining Percentage: 1: 0-25%; 2: 26-50%; 3: 51-75%; 4: 76-100%
For example: (++3) stands for 51-75% of cells have medium staining
NC: Negative Control; na: no tissue materials on slides

FIG. 3

SEQUENCE LISTING

<110> Zhang, Jimmy
Astel, Jon H.
Carroll III, Eddie
Endege, Wilson O.
Ford, Donna M.
Monahan, John E.
Schlegel, Robert
Steinmann, Kathleen E.

<120> GENES AND GENE EXPRESSION PRODUCTS THAT
ARE DIFFERENTIALLY REGULATED IN PROSTATE CANCER

<130> 200130.463

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<141> 1999-06-11

<160> 339

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gctgggcgtg gtggcatact cttacaatcc cagctacttg ggaggctgag gcaggagaat 240
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ctgaagtgaa ctggttnagn tattctgggn accctcagga gggccttgca agtgtgtggg 900
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ntagngagcg agcccggtgg ataactgccc tggtacncng nagctgnaaa gccgcctgca 360
gaccgaacct gagactgacg tcgcctcanc tatngacnnn nnnccnatnn tgagtgnaag 420
cgtnctnatg ngacactcgg ggnccacgat gcanancgct ancnncccnn ggngtgncan 480
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ctcccaagta gctgcgacta caggtgcacg ccattgcagc tggctaattt ttgtattttc 180
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cctcagcctc ccagagtgct gggattactc ctaagctcaa gcaattcatc tgcctcagcc 360
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aagctcaagc aattcacctg cctcagcctc ccagagtgct gggattacag gtgtgaagca 600
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cccgaatctt aatatcactt ttcctttgnc ataattaaca attagcgaca cagaatcgag 720
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ggnntgcngt gnagtctgtn cctgnggcan cgcgtcatgc atgactttgg gtcattgctg 180
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ctgcccctgt ngncgcatgg gaaatcctaa acaggctctg tggnaaangc tgnnccaagg 360
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gaacataaag aaatagccat ggangattca cagtgtanct ngctgancng ctcatntggc 600
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nnccaaggaa cccnggtttn gggccntgga agggncccctg gncnnggttt cgaggnnttg 960
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tttgncctan tnnaacntta aattngngnt ttnncnncan anngncngnt ttttcaattc 900
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cctcagcctc cccagtagtt gggactacag gcgtgtgcca ccacacccgg ctaatttttg 180
tatttgcagt agagacgggg tttcatcatg ttggccaggc tggtctcgaa ctcctggcct 240
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gcctgtatta tctcatggtt gccttctatt tgtgacaagt gctatgaata ttcctttta 480
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agattgnctt agctgtttgt ggtatccgaa ttcctctgga acatgggcat caggaaccaa 660
gcgatgccac tgctactggg cagggttttt atattttacc taaacagaga ccaatgacgc 720
tgacctacct taatgaaaat ttcagaaaaa ccatctggaa tcagccccat catgtccaga 780
attggaangg aatctgggga tcaatggaac atacccggaa atacttttnt ttcccccaaa 840
ccaaggnaat ggaatgtcaa aagtattgga gcctaattta aaatggggnt tccntantaa 900
agntttgctt tcanttaatg gganacanttg gcnanntggt tttgggnacc cctgcataat 960
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tantntgtaa ncacnatcta anttngcatc agtnctcatg acatncatta catgggacag     600
gggcaagagc agtagctctg gtatgtgaca ttgatcccca gatgccttcc caatctggac     660
atgatggggc tgnnttccca atggttacnc tgaaaatgca ttaagggagg tcagcgtcat     720
ttgtctcatg gatacgnaaa aatctcttnc accctgncca tnaacaggng gcaatcgctt     780
gnggncctga tgnccatgtt ccaaaaggaa tccgatgcca nnagcngctg ggacagtctt     840
aagcttttct tcnccaccct tctatcttga acttncanac gtttccggaa acnccaanga     900
nngttaccac ttgccngacc taaaaaacnc tgttcacgaa nttnaacttn ggatttngga     960
acnctttctt tanaaagggt tatccattgc nctttgtgnc caaataggan ggccnccctt    1020
nnga                                                                 1024
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<210> 9
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 9

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accgccctcg natccctagt aacggccgcc agtgtgctgg aattcgccct ttagagtata      60
gtggtgtgat cttggcccac tgcaacctct gcttcctagg ttcaagtgat tctcctgcct     120
cagcctccca agtagctggg attgtaagag tatgccacca cgcccagcta ctttttgtat     180
ttttagtaga gacagggttt catcatgttg gccaggatgg tctcttaact cctgccctca     240
agtgatccac cagagaggag atcctcggcc tccccaagtg ctgggattat aggcatgagc     300
caccgtgccc agcctacttt ctaattaacc aaaaaaaaaa aaaaaaaaaa aaaaaaagcg     360
gccgctgaat tctattctag aattaagcgg ccgctgaatt ctagacctgc ccgggcggcc     420
gctcgagccc tatagtgagt cgtattagga tggaagggcg aattctgcag atatccatca     480
cactggcggc cgctcgagca tgcatntaga gggcccaatt cgccctatag tgagtcgtat     540
tacaattcac tggccgtcgt tttacaacgt cgtgactggg aaaaccctgg cgttacccaa     600
cttaatcgcc ttgcagcaca tccccctttc gccagctggc gtaatagcga agaggcccga     660
ccgatcgncc ttccaacagt tgcgcagcct gaatggcgaa tggacgcgcc ctgtagcggc     720
gcattaancc gccggcgggt gtggtggtta cnccgcancg tgaaccgnta cacttggcan     780
ggncctacgg cccgnttcct ttcgctttct ttcctttcct ttnttggnca cgtttcggcc     840
gggttttccc cggtnaagct nttaaattng gggcttccc ntttangggn tcccgaantt     900
anngccttta acgggaccnt gganccccaa aaaactttgg tttanggggg angggttcac     960
cgtaanngggg nccatttgcc ctggntaaac nggtttttc ccccnttgac nttgggnanc   1020
cccg                                                                1024
```

<210> 10
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 10

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gccgtcnaga nccatgcnnn agcgngcggc ngtgtnatgg nnanntgcag aanacgncct      60
ncnatcctaa tacgactcac tatagggctn gagcggncga ccggacagng ntnnnggtgg     120
ctnatgccta naatcccagn acttggggag gccnaggatc tcctntntgg tggatcactt     180
gagggcagga gttaanagac catcctggcc aacatgatga aaccctgtct ctactaaaaa     240
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tacanaangt agctgggcgt ggtggcatac tcttacaanc ccagctactt gggaggctga 300
ggcaggagaa tcacttgaac ctaggaagca gaggttgcag tgggccaaga tcacaccact 360
atactctaaa gggcgaattc cagcacactg gcgnccgtta ctagaggatc cgngctcggt 420
nccaagcttg gcgtaatcat ggacanagct gttncctgtg tgaaatgggt aancgctnac 480
aanntnacac aacatacnag ccggaagcat aaagngtnaa gcctggggng cctaatgagt 540
gagctaactc acattaattg cgttgcgctc actgcccgct ttncagntcg ggaaacctgc 600
cgtgccagct gcattaatga atcggccacg cncngggggag aggcggantg cgaatgggcg 660
cttcttncgn ttctcgctta ctgactngat gcggttcggc ccattgnntg cagcaaagcg 720
gnatcngctc acttnaaagg cnggnaatnc cggttntccc cntgaatccg ggggattacc 780
gcaggtnaag aaccatgggg anccaaaagg ccagctaaaa gggcccggga acccggaaaa 840
aaggcccngt tggttggcgt tttttcanaa ggttccgccc ccttgaccgn ngcnttacaa 900
aaattnggag gcnttaaggt cnnaantggg ggaaaccccc cgggaaattt caggntnccc 960
nggggtttcc cctgggaagt tncttngggg gctttccnnt tcnaaacctg gcgnttaccg 1020
gnaa 1024

<210> 11
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 11
gtncgtctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc 60
ttgagcggcc gcccgggcag gtacgcgggg gggcatttcc ctgacgactc gtgtgtgccg 120
tgggggagcg gtagatggcc cagccccaag tgttccgatc ttcctgccca aacatattct 180
gtgacggaaa gcctatgttg acctcgtccg gcactcaagg cgtgggcagc ggcctaacgt 240
ctgctgcggg aacacagtcg cgttgaatgc tattctcaag acagacaaaa cagtgggaag 300
acactacgcc aagctgctaa ctccctggcc attgccggac tctttcaccc ccatggactt 360
tccgctggca ttttaaacaa catagtttct ttctctgtc tctttctctt tctctctctc 420
tttctctttc tctctctctc tctctctctc tctctctctg tcaatctcat aatttctctc 480
tctcgtgcca cgttcccacc caacgctctc tcgcccactt ctactggggc ccacttcctc 540
tcctgctctc tctgtctcaa cgtgattgac tttcttgtgc tgcccaggac ttcttgccca 600
cgtgcgcctt caaaacggta agagctgcaa ctgaacgtgt ganacatggt gcagataggc 660
tgagaggcng cgggaaaaat gcccatgaaa ctcaaagtac tccngccggc gançacgcta 720
angggngant ttcaagcaca nntggcgggc cgttactaan tggattcgaa cctccggtac 780
caaaagcttg ggcgttaatc atgncaanaa gccgttttcc ngtnttaaat ttgttnancc 840
gctcananat tccanacaan cnattacnan gccgggaaan ccaanaaagt tgttaaaacc 900
ctgggggttg ccnnaatgan ttgangctaa ntccnnttta atttncnttg cnccnaangg 960
ccggtttttc cattcgggaa acctgtncgt nccaanctgn atttantgaa tcgggcaaac 1020
tccc 1024

<210> 12
<211> 957
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(957)
<223> n = A,T,C or G

<400> 12
acttttttttt ttttttttt ttttttttt tttttagctt tatttttatt gttgacacta 60
ttacagatag aatgaccaca accatattaa caaaccaaaa acctgtgcac agaaacaaga 120
tgaagaaaat atatcaagat gttaaccaca ctctttggat ggtgaaaaca tgggtgagtt 180
tctcttctac atttctgtaa cttcaaagtt tctataatga acacatttca tatataatgg 240
aaatatatgt agtaaaggtg gactaccaaa acactagaat gatgaccttt caaggaaacc 300
gaaacaaaat aaccataatc ccacaacaac cacacaacta tttcttgttt ttcatctttc 360

ttcccatctt tgacatttat gcatacttat cactaacacc ctaataatca cagactagtg 420
cacagatcaa gatgttaaca gttaattgtt gttgggtgtt gggaatatgt gtgaattttc 480
tttactgaat ttccaaagtt ttgtatgagt atgtantata tttgtaatgg aaaatacata 540
cataagaatt tantaccaaa nacaccaaag attatttaag gaatttgaga caaaaatatt 600
tanccaaatt cccacaatga caacaccaan tttaggtant ttccacatct ntttcaaatt 660
taanggcttt angcacacat attttaacac tggtanccac aagcngtgtt gcnccggaan 720
caanngntng agggaaacca ggtncaagga tggtnancan taagttgtta angggggttgg 780
gaananngga aatttttaa aacanattta cnttaanttt ccaagttttn ccnccgggga 840
annttttng gccaccaatg ggggnncccc nttatanccn ngtnanccgg ggacattttt 900
tnnngggaa atttnganaa atttagagtg ngaaangntt tttacccaan agtnccn 957

<210> 13
<211> 1020
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 13
gtgngtctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc 60
ttcgagcggc cgcccgggca ggtacccagg attcaaaagt catcttcccc ggcgggaggc 120
aagggacgct tatggagaac ctcttaaaga tattgtgagc attctactca ttacttaggg 180
aaagagagcg ggtgttggtc caactctggc ttttgtgcca ggtaggagtt ggtcctgagg 240
ccgcccatct gaccatactg gacctgtttt aaggtttttc tctaaaaaaa ttttagattt 300
gtcaatctgt gctcctgcag ggatgctat gtccaaatgt cccaggattt gtttttttct 360
gtctttcctg agacattccc tgcccagcta cccaaggaat ccttcaaacg agcaaatctg 420
accatatctt ctatggtcag attaaaatct tccatggctc cctattgctt atgggacaaa 480
atcaaaattc ctgagtctgg tctaaaaggt gtttgatgat cttgacctgc tgactttgcc 540
agccttcttg tcagactctc gtgtcatgct ccgcctagac tatgagcctg ctatttcata 600
ctatgtagct ttgtaaagtc ccagaaaatg ctgggctctg actcttttat aactttacat 660
atactgttcc atctgcctgg aatgccttct acttgtctgt ccagcaaatt ctcaactcat 720
ctcttaaggg cccagcttca attgccgcct cctancataa gtcttccctt gatttcccan 780
gcagnaatta nntcccgcgt accccgggga ntcccaatca gtttgtgctt tcaaaactga 840
tggnnngact tccctgaaat ttgggttacc ncaaaacgaa atgggtgaat ccnnttcccc 900
cgggggggct gcaattgcac cctttttaa aggggaaccc tgnaantccc aatggnttaa 960
atttgacncc cttaanggcn tnanttcnat tgagcaactt naaaaggggt ttttttttt 1020

<210> 14
<211> 1013
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1013)
<223> n = A,T,C or G

<400> 14
gtgtcgatgc atgctcgagc ggccgccagt gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt acctcattag taattgtttt gttgtttcat tttttcnaa 120
ngtctcccct ctacnagctc acctgagata acagaatgaa aatggaagga cagccagatt 180
tctcctttgc tctcngctca ttctctctga ancctaggtt acccattttg ggacccatt 240
ataggcaata aacacagttc ccaaagcatt tggacagttt cttgttgtgt tttanaangg 300
ttttcctttt tctnancctt ttcctgcaaa aggctcactc agtcccttgc ttgctcantg 360
gactgggctc cccagggcct aggctgcctt cttttccatg tcccacccat gagccctcna 420
ctagacagct cantaagcct ggcccttcat tctgcgctgt gttcttcctc ngtgaaaatc 480
caatacctct tacctcctct gcatgcaaag attctcaagg attgtcagac ttcaaacgta 540
acagcagaac caccagaagg tccnataaat gcagtagtga ccttctcaag ctgtcaggtc 600
tttaaatagg atttgggatt taatgcnatg tatttttaaa ggaaagaaat aagagttgcn 660

agtttaaaaa tgcatgtctt ttagccaatt cagaatcctg cccccaaact tttttaaaaa 720
gtcaagacag ataaagcttt gggggganacg gaaaaaaann gnnnaaaaaa anaaagtact 780
tcgggcggna acnacgctaa gggnnaattc agcananggg gggccgttac aagngggttc 840
nannccccggt acnaancctt gggggtttaa caagggcnaa ancnggttnc cggggntnaa 900
aattgttacc cgcnaaaaat tccanaaaaa natncgaacc cggaaancca taaanttntn 960
aanccccnggn ggccnaaggg agngnnnaac cccnaataaa tggnttggnc cnt 1013

<210> 15
<211> 951
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(951)
<223> n = A,T,C or G

<400> 15
accctagggc aaatactgag cagggtaaaa ttcccagaat acccactaga agcgtggaat 60
atatcaatat cctaggaaga agattcagca caccaaattt cccattactg ataacagctc 120
tgaaggcata ataagaaagt gagtgatcag aagagcagag aaatgacttg ttccagtcac 180
tgccatcttg tttacccttt cagtggttcc cttacccttt tccccactgg gcatacagct 240
catctctctc tgagtccttt tctgctttcc tcctttgctc taaacgttcg agtttcaaat 300
tcctcttacg accagactta tctcgaaata cggtttcagc atattgaaat tcagctgcaa 360
aggaaaatta tactcaaata tcaggatcaa aatcagaaat aacattctaa gagatcaaat 420
caaccgcttg ggattctaat gctagataag aacttctgca gccagaccaa agtagttcct 480
accaacatct tggtgcatat tggcactggg cccaagaaat ggcattttcc tttttttttt 540
ttttgagatg gagtctcact ctgttgccca ggttggagtg cantgggcgc gatttggct 600
cactgcaacc tccacctccc aaggttcaag cgattctcct gtctcaagcc tcctgagtna 660
gctggggaat acagggcata cnacancatg cctggctagt tttttttttg gaattttggn 720
tagagacagg ggtttcatca nggttngccc aggcctggtn cttggaactn anagaccctc 780
aggntggatt caacccaact tccgggctac caaaaggtng ncgngggatt acangcattt 840
anncaacngn gccctngggc naaaatggna antttcang aagggaaagc agcnntgggg 900
atcccnggnn naantttcac caaggcctta aaccagggnc gtaaatttgt t 951

<210> 16
<211> 1008
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1008)
<223> n = A,T,C or G

<400> 16
gtgcgatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt cgcccctttcg 60
agcggccgcc cgggcaggta cattacttgg tgttaacatt gttggcagtg gtagcccctt 120
ttcagaaagc aacttgctgt aagtcagggt gtccgttcca accttcagct agtgaaaagg 180
tagtaacaaa tggtaaacaa gagaatgatt gtttaaacct atctgtggac acttaatgca 240
actgtttaaa aatgataatc acgagttatg tagcaacgtg gaaatatatt tacagaacat 300
taagtggaga aagcaggaca cgaaagtata tttatactac agttataact caacagttca 360
tttatatgct gttcatttaa cagttcattt aaacagttca ttataactgt ttaaaaatat 420
atatgcttat agtcaaaagc tgttgtggtg ttgttgttgt aggcttatag ttgagcatta 480
ttttcttaaa tttcttgaat gttctttatg gtagtgttac taaaaagttt atgatcacat 540
tttcattgtg aacataattt gaactcatta tcacacactt ggaaaataca gaaaagtgga 600
ggaaaaaaaa tcatatcccc ancatccaaa gacatatact ctcctcttat cctgttcaat 660
cctggtttcc ggtgcacaag gtttatgatt ataactgtgt caaaatgtat aatcaaaata 720
gctgttacat taccttggtg gnantaaggg taaatacctt caccttaaat ttttcaaaan 780
gttcccaana ataaaggtcc ggataacagt ggtataagtg tgtcccaatt gggggtgcan 840
aatacattcc cangngggaa aatttnnaaa tnaagttaaa ttattttaaa aaatttccaa 900
aattcccaan anctaanaac taangggnaa aaacctngat cgggntnccc caaacnngtt 960

taantgnnac nccttgggaa aanaagnttt aaaaanggtg gcaaaaag 1008

<210> 17
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 17
gtgnctctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc 60
tttnnanagg ncgcncgggc angnantctt cccncctntg ccatnannca cggnnanaan 120
cngcagtggc actaantntg agacaatctt ncaaaccagc ttcatgtcgc tncacttntc 180
nnngtncaag angagggcca ggangggaaa catcacanct gcgctaagnc cngntccggg 240
nngtcagcat nngntctgtt ncaanncccn cgntcggtcc cctcatccta ctctgcctcc 300
natgactttg cncctcagac ntcntggaac naaggnttcc nggggggcac accgcgtccg 360
gccgnnnntg tctcggggcc acttggcgtg tgtgataaat caatcaagct gttnanntcg 420
nacgagtctc nggtngcctg canannntaag cctcatcatc agagcctttc ctcaaaactg 480
gantcccana tgtcatcagg ttntggttnt tttcagccan naggaagccc tcngcattga 540
atccnagaac ttgggcatgg tnnaagatct acaagntnga atacgctgcc cgcnanaanc 600
nttcaaccct aacaggaagg tnggattcaa ggaaggtgta anggnncatt annccacncg 660
ggggnaccaa gggagntana antanncatn nntttgggtt cgcccnccga agggnnttaa 720
cccccggaat tnnntttnng ntnaaggggg gnnnngggna aatcccngtt cnncatttgg 780
gaaagggann ccttnccttn cnntnggcct ntaaaagnnt tancaanacc cgnnatnntg 840
ttnanggccc cgnttttcaa nggggttaan nnnttngggn aacccccnnc cccaaagnng 900
gnnnaanggg ggnaattccc aanaaaacng gggggnncct tnnnnnangg gnttcngnnn 960
ccccnaaagg nnncntgggg ggnnannann gnncnaaaaa gggttcccnn nnnnaaattt 1020
tttc 1024

<210> 18
<211> 981
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(981)
<223> n = A,T,C or G

<400> 18
acgcgggaca gagagaaggt taagagcaac aagatgggag gcagctgcat ggaacctgtc 60
ccactgagga agtaaaacag agtttactc ttgttgccca ggctggagcg caatggtgcg 120
atctcggctc accgcaatct ctgcctcctg agttcaagcg aggagcaacc ctacctgatg 180
gactggactt ctgcctggat tggagtttga tcatgcctcc atatgggtgt ttaccaggcg 240
tatgcattga acctgagttt gtctcttcaa tacaaggaaa atctctgccg cttagtgatt 300
ttccaagaaa catgagcttc tgcctttcaa tgaggaagat actcagaagt catgttcgag 360
cactccggaa aatgtccttg gagtttcaac atttctttgg tcttccacat ttcattttgt 420
cctgattaaa gaggaagcca agttgctgtt tgtgtggcca tgtgagcagg canggagatg 480
gtggctgcct agaagccaag agaagtggcc tcaagatgaa atctaccttg ctggtactgc 540
ccggggcggc cgcccgggca aggtacnttt tttttttttt gttttttttt ggcaaaaagg 600
ctgtaaagct tttttgggga gaaattttaa tgggncaaan tttccaacac aggnagcanc 660
cctgaaacca attttaagcg ggtccttccc ttttaaggct gtnnaattgc cccttcaanc 720
ttcctcaagg ngtttttcac cctcccnccg ggattttggn aaaggcccaa aantccntgg 780
gnnaanaagg gacaatctcc cgggnttaaa aaccaattnt ncggggngna accnggttcc 840
ctgggctann cnccttttaan ggntnccggg gcccttttgn gggggnaatt ttcaaacggn 900
ncctncattt tctnaggggg naanccncct tngggtcann gggncnannn cccaagnctt 960
caaanccnaa ntcttttggg g 981

<210> 19

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<211> 980
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(980)
<223> n = A,T,C or G

<400> 19
actttttct ttttttttt tttttccgtc tccccaaagc tttatctgtc ttgacttttt     60
aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta aaactagcaa   120
ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat ttaaagacct   180
gacagcttga gaaggtcact actgcattta taggaccttc tggtggttct gctgttacgt   240
ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg tattggattt   300
tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg tccagtggag   360
ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc cagtccactg   420
agcaagcaag ggactgagtg aagccttttg caggaaaagg ctaagaaaaa ggaaaaccat   480
tctaaaacac aacaagaaac tgtccaaatg ctttgggaac tgtgtttaat gcctataatg   540
ggtccccaaa atggggtaac ctagacttca gagagaatga gcanaganca nagggagaaa   600
tctggctgtc cttccaattt tcaatccgtn atcccaggtg aagctgggta ngaggggag    660
ancattngna naaaaatnga aacaacanaa nccagtttac taaatnaagg gaacctgccc   720
cngggcgggc cnccaanggg ccaaatttca ancaacanng ggcgggcccg ttaccaantg   780
gnattccgaa gccncgggta accaangcct nggngtnaat ccagngggnc aaanccngtt   840
tnccnggngt gnaaattggt tancccgccc naanaattcc acancaacga atcngaagnc   900
cgggcnagca tnnangnnta aancccgngg ggggcncaaa agggaatgnn nccanacccn   960
attaaatncg gttgcccctg                                               980

<210> 20
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 20
cttggtaccg ngctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcca    60
tcctaatacg actcactata gggctcgagc ggccgccggg caggtattca gcggccgctt   120
ttttttttt ttttttttt ttttttttt attgntgaca ctattacaga tagaatgacc   180
acaaccatat taacaaacca aaaacctgtg cacagaaaca agatgaagaa aatatatcaa   240
gatgttaacc acactntttg gatggtgaaa acatgggtga gtttctcttc tacatttctg   300
taacttcaaa gtttctataa tgaacacatt tcatatataa tggaaatata tgtagtaaag   360
gnggactacc aaaacactag aatgatgacc tttcaaggaa accgaaacaa aataaccata   420
atcccacaac aaccacacaa ctatttcttg gttttcatct ttcttcccat ctttgacatt   480
tatgcatact tatcactaac accctaataa tcacagacta gtgcacagat caagatgtta   540
acagttaatt gttgttgggt gttgggaata tgtgtgaatt ttctttactg aatttccaaa   600
gttttgtatg agtatgtatt atatttgtaa tggaaaatac atacataaaa tttattacca   660
aaacaccaaa gattatttaa ggaatttgag acaaaatatt taaccaaatt cccacaatga   720
caacactatt ttaggtattt tccacatctt ttcatttaag actttatgcn cncatattta   780
acactggtat ccacaagcgt gtgccctgaa accaggatan nggggaaacn ngatcaagat   840
gttagccagt agtttggtag gnggttggga aatataggga attttttnaa aaaaatttac   900
tttatttncn aaattttccc cttgggnaag ggattatggc ncnccaangg gngcccccctt  960
aaanacnctg gttttcngga ccttttttt nggggaccat ttggaaaaaa ttaangggga   1020
aggt                                                               1024

<210> 21
<211> 1024
<212> DNA
<213> Homo Sapien
```

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 21
nagnngcang cncgagcgcg cgccagtgtg atggatatct gcngaattcg cccttcntan 60
cngnngncac tnaatgcang ngcnnaacca tgataacccg agttatgctn agcanaggaa 120
ctatatgtac agaaacatta agtgnngaaa gccnnacncn anggnanntg aatactacng 180
tnataactna ncagaccatt nanatgctgc acatttaaca nnncntncan acagnanatt 240
ataanngnnt ananntatat atgctnatng accaaagctg tngaggggtn gccgttgaag 300
gcnnnnngnt nagcattanc atnttacnnc acttgcctgn cctntatggc agggttacta 360
tctttgttac tgatcacgac atcantgcga acntaanacn aacncnntat nacacactng 420
nnanagcccg aatcgngnng gaacagtatc ntntcnccnc canccnnaga catntncnnn 480
cctcttatcn tgancattcn agnttctgtg cacaggtnta tgatnntanc ngtgncaaan 540
tgnntcttna aantanttgc cacatnacct tngaggantt atggannaan actctcactt 600
taaanccnnc aancgacccc nanaanactg tnctgntaac agtgcanaat gtgtgatttc 660
atagttntgc acacacatnc ccacnggaan cacaggcgtg tgcactgaac attntagagg 720
ntacctatct gccgacacct aacactacng gtnacggcaa gatcggaacc tntaannggg 780
ttaacncaaa cnctagggat acccngggaa atatgtggcc caccgtttaa acccccgaag 840
tgcccngtac ccnggacatt gttttcgtgn cggtanttgg gttaaanntg ggntnaaaac 900
cctaattccc cctgggggtt tgccactaaa tttgaaggac cttttggccc tgccaaaatc 960
annaaccctg gcncanaact ttgggggganc nggnnaggna gggtnnccct ttttttccga 1020
aggc 1024

<210> 22
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 22
gtgcgatgca tgcncgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta cttttttttt tttttttttt ttttttttag attccacata 120
tgagtaaaat catgtggtat ttgacttgcc ttttaaaaca cagtgaagaa tctgtcttac 180
tttattcagg gtaggagaag ctacctgggc tccccataaa tgaggtgctc catcccatca 240
tacagcccca tcatattcag tgcttcccag atgacctcct caggggtgca gtagccctct 300
atgaagatta tgcttaggat aagtatgaga atgccagtct tgggcatgct ctggacatca 360
ctcagcatcc catcataggt gaggcccagg gaggtgacaa ggacaaagga gtggccagtg 420
ggatccactt cctttacatc aatgccaaag accagcagca tgcactcgga ggcttcacta 480
aacaacaaag ggaagtggtc ttcataattt tttatgacac tctccaagta tttctgcctt 540
tgtgatcggc tccttcattt gatacttgaa gagcagaaac tgcaccaaat cagtcacctt 600
ttcatctatc tcacttctgg gtaaagactc actgtctggc aaggacctgg tagggtgctt 660
gggactcccc tccttttggc tgcnggagnc ctcancagat tgatctaatg gaagggaaac 720
aacgacccna ggggaaggag cagggctatc tngagcaacn ctggggaagg atttggggtc 780
nccatcatca ngcagnaaac tccctcccgg gggtnccttg ggnanttaaa gggatnccca 840
ggaaggagga nggagggaan agggaggang agggaaaaac naggntngga aaaagggacn 900
cggngggaaa ttggggntta tacaccgccn ncnnnaannn ggggngagnc ngnngnccng 960
tcgnggncnn gnttccnntt gggngaagnn ggnttctcnn angggncgnn nnnnnnnnnc 1020
cnnt 1024

<210> 23
<211> 948
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(948)
<223> n = A,T,C or G

<400> 23
```
actttttct ttttttttt tttttccgtc tccccaaagc tttatctgtc ttgactttt       60
aaaaaagttt gggggcagat tctgaattgg ctaaaagaca tgcattttta aaactagcaa   120
ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat ttaaagacct   180
gacagcttga gaaggtcact actgcattta taggaccttc tggtggttct gctgttacgt   240
ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg tattggattt   300
tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg tccagtggag   360
ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc cagtccactg   420
agcaagcaag ggactgagtg agccttttgc aggaaaaggc taagaaaaag gaaaaccatt   480
ctaaaacaca acaagaaact gtccaaatgc tttgggaact gtgtttattg cctataatgg   540
gtccccaaaa tgggtaacct agacttcaga gagaatgagc agagnagcaa aggagaaatc   600
tgggctgtcc ttccattttc attccgttaa cctcaaggtg anctggtaaa aggggagaca   660
ttagaaaaaa aatgaancaa caaancaatt actaatgang tacctgcccg gggcggccgc   720
aaagggcgaa ntccaagcac acngggcggg ccgttacaan tnggatttcg aacccggtac   780
caaancntgg gngtaaanca ngggncaana accggnttcc cgggggtgaa aantgtttat   840
ccgcccaaaa attccaaaaa ancaatanga aaccggaaan cataaagtnt taaaccctgg   900
ggggggccca aangantgag ccaaanccca attnaattgg gttggncc                 948
```

<210> 24
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 24
```
taccgccctc gcatccctag taacggccnc cagtgtgctg gaattcgccc ttcctatctg    60
tggacactta atgcaactgt ttaaaaatga taatcacgag ttatgtagca acgtggaaat   120
atatttacag aacattaagt ggagaaagca ggacacgaaa gtatatttat actacagtta   180
taactcaaca gttcatttat atgctgttca tttaacagtt catttaaaca gttcattata   240
actgtttaaa aatatatatg cttatagtca aaagctgttg tggtgttgtt gttgtaggct   300
tatagttgag cattattttc ttaaatttct tgaatgttcc ttatggtagt gttactaaaa   360
agtttatgat cacattttca ttgtgaacat aatttgaact cattatcaca cacttggaaa   420
atacagaaaa gtggaggaaa aaaaatcata tccccaccat ccaaagacat atactctcct   480
cttatcttgt tcattcttgt ttctgtgcac aggtttatga ttataactgt gtcaaaatgt   540
atattcaaaa tagctgttac attacctttg tggaattatg gttaaatact ttcactttaa   600
ttttttcaaa tgttccctat aataatgtcc tgataacagt gtattatgtg tgtctccatt   660
ggtgtgcata atacataccc agaggaaaaa ttagaaaata aagtaaatta ttttaaaaaa   720
ttacctatat tcccaacacc taacaactac tgnttaacca tcttgatctg nttcctctat   780
cttggttcag tgcacacgct ttgngaataa cagtggttaa atatgtgtgc cataaaggcc   840
ttaaatggaa aagatgtggg aaaaataact taanaataag ggtggccttt gggggaaat    900
ttggttaaaa aattttgggc tcnaaaattc cnttaanaaa acctttgggg ggtttgggna   960
ataaaaatnt taanggangg aatnttcccn ttccantttt nattccttcc tcttcccaaa  1020
actt                                                                1024
```

<210> 25
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 25
gccgtcnaga cncatgcncn agcgnncgnc ngtgtgatgg atatntgcng aattcgncct 60
tccatcctaa tacgactcac tatagggctn nagngngcca ctattncnga tngaangacc 120
acngccatat taacaaacca aaaacctgtg cacagaaaca agatgaagaa aatatatcaa 180
gatgttaacc acactctttg gatggtgaaa acatgggtga gtttctcttc tacatttctg 240
taacttcaaa gnttctataa tgaacacatt tcatatataa tggaantata tgtagnaaag 300
gnggactacc aaaacactag aatgatgacc tttcaaggaa accgaaacaa aataaccata 360
atcccacaac aaccacacaa ctatttcttg gttntcatnt ttcttcccat ctttgacatt 420
tatgcatact tatcactaac accctaataa tccagactag tgcacagatc aagatgttaa 480
cagttaattg cngntgggtg ttgggaatgn gcgtgaattt tctttactga atttccaaag 540
ttttgtatga gnntgtatna natttgtaan ggaaaataca tacatnaaat ttattaccaa 600
aacaccaaag attatttaag gaatttgaga cnaaatattt aacccaaatt ccacaatgcc 660
aacactnttt taggnatttt ccacatcttt tcntttaaga ctttatgcnc cccataatgt 720
aacactggta tcacaaagcg tgtgcactga aaccagggat nnagggaacc gancaagatg 780
ttnncagnag ttggtangng gatnggaaaa taggnaattt ttaaannaat tnacttttat 840
ttccnanatn tccctttggg gatgncttat gcncccccat gggggncccc ctttananccc 900
ctggtaatca nggccntttt ttttggggaa cttttggaaa aaanttnaag gggaangttt 960
ttacccataa tttccccaaa ggnanggggn acncnttttt ggaanatcct ttnggcncct 1020
tttn 1024

<210> 26
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 26
gtgcgatgca tgcncgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta cttttttttt tttttttttt tttttttag attccacata 120
tgagtaaaat catgtggtat ttgacttgcc ttttaaaaca cagtgaagaa tctgtcttac 180
tttattcagg gtaggagaag ctacctgggc tccccataaa tgaggtgctc catcccatca 240
tacagcccca tcatattcag tgcttcccag atgacctcct caggggtgca gtagccctct 300
atgaagatta tgcttaggat aagtatgaga atgccagtct tgggcatgct ctggacatca 360
ctcagcatcc catcataggt gaggcccagg gaggtgacaa ggacaaagga gtggccagtg 420
ggatccactt cctttacatc aatgccaaag accagcagca tgcactcgga ggcttcacta 480
aacaacaaag ggaagtggtc ttcataattt tttatgacac tctccagtat ttctgccttt 540
gtgatcggct ccttcatttg atacttgaag agcagaaact gcaccaaatc agtcaccttt 600
tcatctatct cacttctggg gtaaagactc actgtctggc aggacctgta gggtgcttgg 660
gactctcctc cttttggctg ctggagccct caacaagatt gatctaatgg gaaggaaac 720
caaccnaccg aangggggang gagcaggctn ttctgaagca ctctgggggga aggatttgg 780
ngtncncnat catncagcan gnaaacctcc cnccgggggt gccttggnna ttananggtt 840
agcaaggang gaggacgnag gaananggan gnangnaggg aaaaagangg attggaaaan 900
aggganccten ggtgggaaat tggggttttn nagcaatccc ccnccaaaaa ncnaggggaa 960
ccctgttcaa cccncanggc cnggnttcca cttttggaat ttgaaanttt cctcaaggaa 1020
ngaa 1024

<210> 27
<211> 935
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(935)
<223> n = A,T,C or G

<400> 27
acgcggggtg gggggggtcc tggtctttgg cttctcgact cggtcctgtt tcgacagcga 60

acatgtcgcg gcctgtcaga aataggaagg ttgttgatta ctcacagttt caggaatctg 120
atgatgcaga tgaagattat ggaagagatt cgggccctcc cactaagaaa attcgatcat 180
ctccccgaga agctaaaaat aagaggcgat ctggaaagaa ttcacaggaa gatagtgagg 240
actcagaaga caaagatgtg aagaccaaga aggatgattc tcactcagca gaggatagtg 300
aagatgaaaa agaagatcat aaaaatgtgc gccaacaacg gcaggcggca tctaaagcag 360
cttctaaaca gagagagatg ctcatggaag atgtgggcag tgaggaagaa caagaagagg 420
aggatgaggc accattccag gagaattccg gcagcgatga agatttccta atggaagatg 480
atgacgatag tgactatggc agttcgaaaa agaaaaacaa aaagatggtt aagaagtcca 540
aacctgaaag aaaagaaaag aaaatgccca aacccagact aaaggctaca gtgacgccaa 600
gtccagtgaa aggcaaangg aaaattnggt cgccccacag cttcaaaggc atcaaanggg 660
aaagaatccn tctccaaaag aagaaagatg agggaaccgg aaaacccccc agaaaaggaa 720
aacatctana agcccccccaa cccagaaatc tggggataaa ggggctgaaa aataaacccc 780
cntttgggga agntttaaaa ttatgaangg nctggggaaa aaattttttt aaaaaannnn 840
nnnnnnnnna aaaaaanttt cctgcccggg ggggcgccnc naaaggggga anttcaanaa 900
aaangggggc ggtttaaaaa ggggtttcca ccccn 935

<210> 28
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 28
cttggnaccg ccctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcct 60
atctgtggac acttaatgca actgtttaaa aatgataatc acgagttatg tagcaacgtg 120
gaaatatatt tacagaacat taagtggaga aagcaggaca cgaaagtata tttatactac 180
agttataact caacagttca tttatatgct gttcatttaa cagttcattt aaacagttca 240
ttataactgt ttaaaaatat atatgcttat agtcaaaagc tgttgtggtg ttgttgttgt 300
aggcttatag ttgagcatta ttttcttaaa tttcttgaat gttctttatg gtagtgttac 360
taaaaagttt atgatcacat tttcattgtg aacataattt gaactcatta tcacacactt 420
ggaaaataca gaaaagtgga gaaaaaaaaa tcatatcccc accatccaaa gacatatact 480
ctcctcttat cttgttcatt cttgnttctg tgcacaggtt tatgattata actgtgtcaa 540
aatgtatatt caaaatagct gttacattac ctttgtggaa ttatggttaa atactttcac 600
tttaattttt tcaaatgttc cctataataa tgtcctgata acagtgtatt atgtgtgtct 660
ccattggtgt gcataataca tacccagagg aaaaattaga aaataaagta aattatttta 720
aaaaattacc tatattcccc aacacctaac aactactgnt aacatcttga nctggttcct 780
ctatcttggt tcaagtgcac accgcttgng aataacaagg gttaaaaatg ngngccataa 840
aggtcntaaa atggaaaagg atgtgggaaa aatnacctaa aaataggggt ggccattggg 900
gggnaatttg ggttaaaaaa tttgggctcn aaaatncctt aaaaaaaanc ctttgggggt 960
tttgggaaaa aaaaatttta ggggagggaa ttttccattt ccaaatntta ntccntactc 1020
ntta 1024

<210> 29
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 29
taggatncat gctcgagcgg ccgncagtgt gatggatatc tgcnagaata cgcccttcca 60
tcctaatacg actcactata gggctcgagc ggtcgcccag gcaggtgcta acaaaccaaa 120
aacctgtgca cagaaacang atgaagaaaa tatatcaaga tgtaaancac actctttggn 180
tggtgaaaac atgggtgagt ttctcttcta cntttctgcn antncanagn ttctataatg 240
aacacatttc atatgtaatg ganntntntg tagtgnaagg tggactaccg gaacactaga 300

atgatgacct ttcaaggaaa ccgaancaaa ntnaccntan tcccacaana accacannac 360
tattncntgg tnntnatgtt tcttcccatc tttgacattg atgcntactt aggactancg 420
ccctaataat cccagacttn ggcacagatc aaganggtaa cnggtgattg gaggtgggtn 480
gccggaantt ggggtgantg ttntttatgg anttnccann ttttggtang ngattgnnna 540
aaattngaan nggaaacnct tacttnaant tgnttaccnn aacnccnagg atnttttaag 600
gattnggggc cnaaattttt acccaaattc cnncaangcc ancnctgtnt aagtcatttt 660
caaanttttt tcncttaaag accttaaggc cccctaaggt aacctgggaa tanaaggggg 720
ggcacntggn accaggntcc nagggaacng nnccaagant tttccccntt ntttgtttgg 780
gggttgggaa atnnnngnaa attttttaaa ggtaatncac ttaatttgcc aaaggaattc 840
ccttnggggg nggnnttatt gcncacccat gggagacccc cntaaggccc cnggaataag 900
ggcctttttt tttngggacc atttgggaaa aatttaaang ggaaggcnnt ttgnaccctt 960
aatttcccca aggnaaangg aaccnccccnt tttgganatt gcattttngg ccccgttttt 1020
aagg 1024

<210> 30
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 30
gtgcgctcta gatgcatgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc 60
ctttcgagcg gccgcccggg caggtacttt aattttgctt gttcaaatga tctacactta 120
cattttgcaa atcttttttt ttaaattttt taaattttat attttttttc cagccaactc 180
aaggccaaaa aaaatttctt aatatagtta ttatgcgagg ggaggggaag caaaggagca 240
caggtagtcc acagaataag acacaagaaa cctcaagctg tgaggtcaat ttgtaattaa 300
aagaatacta agattagatg aacacaacac tcagaaatac tctaggagag ctgaaaaaga 360
aggaacagat gttaacaaaa caaattaagg ctgctgggga acctgagtcc atgttaagct 420
tgggttgact gtaaagaatt tttttttttt taatgcaagt tagacatgga gttagagggt 480
cagataaata acgaagagaa ttaagttagc gatagaaaga tctaaggata ctagctcctg 540
ggcacctagg gtgcaaactg acttgtggca gcataagctg atgctgcaca ggggacccaa 600
gccatgttgc tacttgtcac ttaaggcang aagcgcacaa aggaagtgat gaaagggtat 660
tagcctgcaa cattatttac agcatganag cctctcctac gggtcccaac cttcattagg 720
cactactggt gattcaagtg aatgggttgt aacccantcc ttaaaaggca aaggatgtta 780
ggantttaca gggaaaaaag cttccggggt tttancaatt caccaatcan caaaccacat 840
attgaagttt ggttaaaaaa aaaaanannn anaaaaaagt nccctcggcc gngaaacanc 900
cctaaggggg naaattccag canactgggn gggccgntta caaaggggtt cgaaccncgg 960
taccaaacct tgggggttaa ncaaggggca aaancgggtt ncccgnnggg aaaattgttt 1020
nccg 1024

<210> 31
<211> 1019
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1019)
<223> n = A,T,C or G

<400> 31
gtgngatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta ccatgctgac ttcttggtat cttttaaggc ctaattttcc 120
cttccttgag attactgtag tgtgttccag ctaatttcta tttggaaacg agttggaaca 180
gctgaaaact aggtattatt gaaggcaaag cagcctcacg tcagtttttt atcagctcat 240
ttgggaagtt tttttttttt ttttttttta attaattaga aagtaggctg ggcacggtgg 300
ctcatgccta taatcccagc acttggggag gccgaggatc tcctctctgg tggatcactt 360
gagggcagga gttaagagac catcctggcc aacatgatga aaccctgtct ctactaaaaa 420

```
tacaaaaagt agctgggcgt ggtggcatac tcttacaatc ccagctactt gggaggctga     480
ggcaggagaa tcacttgaac ctaggaagca gaggttgcag tgggccaaga tcacaccact     540
atactctagc ctgggcgaca gaggtgggga aaaaagtagg acccctgtcc tatattcagg     600
tttttctcac atatatgaac ccatctaaat tctacgttgt taaaggtanc ttaggttaat     660
taagtccata cttatttaag accaatatgg ggtgaaatgg gatttttttt taaaaatcct     720
acagntnagg ctttccnact ttccttcnaa atgaggaaaa aaaggtgaca aaaattcaag     780
tgtcaatgtc ccctcctggg gaaanaggtt tanaaaaaca acaggctcaa ccttctgaac     840
tnctaacaan ttcccttnga aanttaacga anccattaaa atcnngattt taaaagagga     900
aaanaaaaaa gttcctcggn cggnnacaan cctaagggng aaattccaca aaaannggggg     960
ggcctttana aagnggttcc nacccggtac aaaaccttgg gnttaaccan gggccaant     1019
```

<210> 32
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 32

```
accgccctcg natccctagt aacggccgcc agtgtgctgg aattcgccct tgttgttggg      60
tgttgggaat atgtgtgaat tttctttact gaatttccaa agttttgtat gagtatgtat     120
tatatttgta atggaaaata catacataaa atttattacc aaaacaccaa agattattta     180
aggaatttga gacaaaatat ttaaccaaat tcccacaatg acaacactat tttagttatt     240
ttccacatct tttcatttaa gactttatgc acacatattt aacactgtta tcacaagcgt     300
gtgcactgaa acaagataga ggaaacagat caagatgtta gcagtagttg ttaggtgttg     360
ggaatatagg taatttttta aaataattta ctttattttc taatttttcc tctgggtatg     420
tattatgcac accaatggag acacacataa tacactgtta tcaggacatt attataggga     480
acatttgaaa aaattaaagt gaaagtattt aaccataatt ccacaaaggt aatgtaacag     540
ctattttgaa tatacatttt gacacagtta taatcataaa cctgtgcaca gaaacaagaa     600
tgaacaagat aagaggagag tatatgtctt tggatggtgg ggatatgatt tttttcctc      660
cacttttctg nattttccaa gtgtgtgata atgagttcaa attatgttca caatgaaaat     720
gtgatcatta aactttttag taacactacc aataaaggaa ccatttcaag aaaatttaag     780
gaaaaataat gctcaactat taagcctacc acaaccaaca cccacaacag cttttggact     840
attaagcnta tatattttta acnggtatta atggaactgg ttaaatgaac tggtaaaagg     900
aaccgcatnt taaatggact ggtgnggtta taaccggtgg tataaaaana cctttggggc     960
ctggtttttc ccttaanggt ctgnaaanat attttcncgt ngtccanacc ncgggatatc    1020
aatt                                                                 1024
```

<210> 33
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 33

```
gccntcnaga cncatgctcg agcggncgnc agngtgatgg atatnnngca gagnncgccc      60
ttccanccna atacgacnca ctatagggcn nncnnnntng gcnnctttgn tgcccctccn     120
ctcgnataat anctatatta acgaaattgt nctggccttg agttggctgg agagaaatat     180
tnngagnnnn accngtnnnn ntnngnnatc ngtaaantgt aanagtagnt catttgaaca     240
agcaatnatt naantaccca ctggnggaaa ngngnctgaa tcttactctt ntggatctgc     300
aggantaggg cttgtnagta tgtcaaanat gcnnncagtg tcaangttta ngccnattgt     360
aganctngta gcaggaancn acnntgangg ancnncagaa nggagnccctn anacatnncc    420
agatntacga ggngagagga gacanacnga gaaagacacc ntaggnncga nctgnagaag     480
gncaggattc tgagaatgaa ntgcncggnn agtccnganc agattggaaa aggagnttct     540
ganggnatgg tgcacnngag ggctgacngg tangaggnac tgntgttgga acgnacatag     600
```

cgaaagntgn tgngcagtga ggattactac atgnngaaag gactcttgaa acgaggaact 660
aactgtgatg ncanggctga agtttgggcn nccatacttt gnaggttaca attnttngca 720
gtggncgncc cgtttaaana gccnttttga tggaaantca agggtgnncg gtacnacctt 780
ccntttaggg nacaaggcnt tnccgantgg gtngccagga agaanganng ccnnanccct 840
annnggnggg cccccttaatn gcacngggtg aacaatgcna accctcgggt tattggaacn 900
accgnggana anatggttac cgaaccatta ngtggggnna aacccggacc ccggaaggct 960
tttttnncct cngggtaaaa acttaacaga ccnatttttt gcccgccntt taacangtct 1020
tttt 1024

<210> 34
<211> 982
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(982)
<223> n = A,T,C or G

<400> 34
acaacaatct aagcaaatct caaatacaac atacttgtaa ttagaacaca atgcaatgac 60
ttgattttag caagaactag acacttaatt tggtaaaaga aaccaaacaa tgcattatat 120
tgaatactaa gctaagttac cataattagt cttacaaatt ctcaaatttc acaactactt 180
ttgaacatct aaatttaaac ctaaattttt taattaaatg cctgttcaac aaagctaatt 240
ggaacaaaca catttatgta aatttacatt ctagaatacc agggtaaaca aggagacgtt 300
attcaaagat gaatgagaaa gttctattct ttttcatcat ttgtgtgatc aggttgcaaa 360
ggacatgctc tttcctcgat gaaactgatg tcgaattagt ggcagaggtg gaagaaccaa 420
gcacctttct gggggctcga gcagccacca cttttctgta agtgcctggg aacactgtct 480
gctttagtcc gcaccatgtt caaacaagaa gagaggagag gagagaacga actgacttcc 540
cagccgaagg tgtttcactg ggacaaggcc ccgcgttacc tgcccggggc gggccgctcg 600
aaanggcgaa ttccaagcaa cactgggcgg gccgtttacn nagtgggatt cggngctcgg 660
gtancaaggc ttgggggtaa tcaaggggca atagccggtt ttcccngggg tgaaaaatgg 720
tnttccgngc acaantccca nacaancatt ccgaagccgg gaancntnaa agtgttaaaa 780
ncctgggggt ngcccaaatg angtggngct naactcccat ttaaattngc gnttgcgccc 840
nanngggccng cctttccaat tncggggaaa cctgttncgt gccaagtcgg cantaaagaa 900
atcncggcna antccccggg gnaaagggcg ggnttgccgt nttggggggc gncttccggn 960
tttcccgggc caaagggann ng 982

<210> 35
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 35
cttggcccgc cctcggatcc ctagtaacgg ccgccagtgt gctggaattc gcccttccat 60
cctaatacga ctcactatag ggctcgagcg gccgcccggg caggtataaa atttaaaaaa 120
tttaaaaaaa aagatttgca aaatgtaagt gtagatcatt tgaacaagca aaattaaagt 180
acccactggg ggaaatgtgt ctgaatctta ctcttctgga tctgcaggat tagggcttgg 240
aagtatgtca aagatgcagg gagtgtcaaa gtttaggaag attgtagagc tgagagcaag 300
aagcagaaat gagtgagtca aagaagggag tcctaataca tcaccagatc taggaggggga 360
gaggagacag acagaagaaa acaccagagg caagaactgt agaaggccag gtttctgaga 420
atgaattgag cggggtgtcc tgagcagttt ggaaaaggag tttttgatgg tatggtgtag 480
gtgagggctg gctgcatagg aaggactgag gttggagcgg acatcgggaa agctgagggg 540
cagtgaggtt tactacatgg gaaaaggact cttgaaacga gaatcagtgt tgatgtcagg 600
gtgaactttg tgggtacatt acttggtgtt aacattggtg gcagtggtaa gccccttttc 660
agaaagcaac ttgcttgtaa gtcanggtgt ccggtccaac ctttaactag tgaaaaggta 720
gtaaccaatg gtaaaccagg agaatgattg gttnaaccct atctgnggac acttaaatgc 780

cactggttta aaaatggnaa tcacgagttt tgtancaacc ggggnaatat atttaccgga 840
acctttantg ggnnaaagcc ggncnccnaa ggntttttat tncttcnggt tttaacctta 900
acaggtncaa tttataatgc cgggccattt aacaggtcat ttttaacccg gtcnnttttt 960
acccnggtta aaaaanntnt atgcctttag gncaaaanct ttttnngggg gnttnttgtt 1020
nang 1024

<210> 36
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 36
taccgcctcg natccctagt aacggccgcc agtgtgctgg aattcgccct tccatcctaa 60
tacgactcac tatagggctc gagcggccgc ccggggcagg tagcaaatgt tgtggcattc 120
ctcctcctcc tcaagtcttt acccgaaact acttcccaag agaggttgct cttcccaaag 180
aatcacctgc cctgggacca tatggggcta ggctgagggt caggagccaa gagcctggtc 240
ccaactctgt ctgtggctta ctgtgagacc ctaggcaagt tgcttaccct ctctggggct 300
caaattcttc ctctttgaaa taggaataat aacttcatca ctagaattct tcacctggtt 360
gttgtgaagt taatcagaat aaatgtggag ataatacatg aatgagcgta cagaatatta 420
tttggctgtt ctgtggcatc gatataggtc atgatagtga caatagtgtc tgtcattgta 480
ttccacacca cttcttccct cagctaaagc aggaaaagaa aggaggtaag tctctctgtg 540
ttttttcttc ctttccccaa gcccactttg ttaccttcct tggttgctgg atgagaaatt 600
agtcagaggg tcagagagga cctcaacttc atatgcttta aatagagcat atgcaatttt 660
aaaccatcct cttaaccaat ttttcttttc ttttcagttt ttccccagtt atacttccac 720
atgatacacc agagaaggaa gatcctttct catactgaag aacacaagaa atttgaatag 780
ttcctgcttt ctgnaccttc caccaaaaca aacttttcaa tgatccaaaa aactggcttt 840
gnactgggga gtcacggaat gggccggctt ccangganca tggcggnngg gcctttgcgg 900
ngtcggccct gtggtggcgg cggaaaggna accgggggca tggnttnccg agcctggtct 960
tgccccccng ggncatggtg tggaggcaaa gaancctgaa gtccccacng gcccccggga 1020
agna 1024

<210> 37
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 37
cttggcaccg cnctcggatc cctagtaacg gccgccagtg tgctggaatt cgcccttcca 60
tcctaatacg actcactata gggctcgagc ggccgcccgg gcaggtgaat tcagcggccg 120
cttttttttt tttttttttt tttttttttt acagggcggc tttttgtttt atttctgctt 180
ttttcccttt ttcttaaaaa aattaaataa agttctcatt atttccccaa tatacatcaa 240
atgagttttc atgcaaagca gcagtcacag aggcagaact gtccccagct cgtgcctntc 300
ggcttgaaga accacctttnt cccggccccg ggttctctgg ngttctcact gaggatggac 360
gacgcccact gtctntccca gctggaactg gctatgacga aacttggctg gcgtagggag 420
aggagtcctc ccctntcccc aggatggggt ctcaggggac agcaagctct ggggcctgat 480
ccccatcact tgnccttcca tctgagactc ccagtgtgac agcttggaca ggtccctctt 540
cccaggaatg cgaggctcct cctctcagct ctcaatggac atggcattaa tgagctgctc 600
caccttataa gccagccgnt gccgccgtgc ctgctcatcc tgctctaggg ccccgatgag 660
ctcctcacta tacttgctga cataggagta gatctcattg gggcactcca acatgttgaa 720
actccacggn gtgcaggcgg gactgctcgg cgagggtagg cattcatggc ctggtcactg 780
gatggctggg aaccttggcc aaggctgcgg nagnatcttt tccccccagc tnttggnaac 840
ttggggaagg cccttgggca taaaaagcaa cttggttgga angggaggn ctttgcccaa 900

```
cccgggggct ttggacgttg gaacaagagt nccttgaagg gtttgggncc cccncaaaaa     960
ngcangcntc cgggaaagcc gcccttgggg gtgncaaaac cccnaactgg ggggttnttn    1020
aanc                                                                 1024
```

<210> 38
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 38

```
taccgccctc gcatccctag taacggccgc cagtgtgctg gaattcgccc ttccatccta      60
atacgactca ctatagggct cggcggccgc ccgggcaggt gccgcttttt tttttttttt     120
tttttttttt tttttgcttc acaactgttt attttaagct gaaacttcaa tattcattga     180
ttacctataa taatagttac tcataaatgt agttaataat taaatataaa aattattatt     240
tttacattta tataaatctc tgaaaaatac caagttttga gagatagagc aagaaattgc     300
ttanaaaatt gcaggaagcc tgaanaatct cagcatcagt caaagcaggt ncaacaaaaa     360
acaattttag acattcattt tttgctttaa gagtgcttaa aataaatgat cacagaatga     420
ataactgatg tatggcaaaa atgagtttaa aactatgtaa gctccaaggc cccaatgtgt     480
ataagaattc tttggaagga ttttgaagga ctgtaaatgt tgcaaataaa agtaaaaact     540
agtagttagg caatgngttt taaactatag ngtcacctac tgntcttctg gtgcctaact     600
gnattcttca acatcttctt ttccttttttg attagaaatc ctggtctacc tcaaaggttt    660
tgcattgntt tctagggaca tcagcaaact ggtagaccat atgagaaaca gaaataaaca     720
gtaatattat ctttagaaat taagcattat gtacncagtg agaaatggat tgacttgata     780
gaccttaaac ccctttcttc ctttcacacc ctttntagna ccacctaang gtatccggat     840
tggggatggg gccccnctnt ggtaatcccc ctnnagtcag gacaggggcc cctaagggcc     900
caattttntt tcgaattaga gaaatncccc atttttttggg gggttggcaa gtnttanccc    960
anggcttgca aaggcttntt tttgaagana cncccaaacc cggggncttn tttttcngga    1020
atca                                                                 1024
```

<210> 39
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 39

```
tcgcccgagc agnangcncn agcggncnnc agtgtgatgg ttatngtgnn gnnttcgcnc      60
tnccatncta atnctactca ctatagggnn cntgngncnc nnggcnagtn ntnacnnntn     120
annggtgtaa ctgatatcat ntcncnnana ccatggttac atnnanntag gtctcnnang     180
nataccangc tntgagagnt ngaccnggaa ntcgnttnga aannttgngc gangccngat     240
caatatccnc atcngncaca gcggntccgc aagctgacaa tnctgnanat tnattnttgg     300
tttanngganc nnttacangn atggnncccn gagatgcatg nnggagtatg gcaaagatgn    360
ntgtaaaact atgtaagctc naaggcccca atgtgnataa cagttcntgg nanggantnt     420
ganggantgt aagngntnaa nntnaangnn anannnaaga ggtangncat gagcccnaaa     480
ctgtagnnnt anctacagng cttanggcgc ctacctggga caggcnacgn cttcattaac     540
cttttgatta gaannacggg ggtaacncac nggttnngca tggtccagta ggngcattgn     600
ccngcngggc aaccatatgc tgngcncaaa taaacggtgc ttttanctca nnagattaaa     660
gctttttggc cacaggggna aaagnatggc ttganaggcc ttaaaccccc gtactcngtn     720
cacccctttn gagaaccncc taacgggatc tggaaatgng atggccccct nttgggaaac     780
nccctanaag anacctcngg ngacccсttg nggcccattt tgangtttag nacngcaatt     840
tncccatttt tgngggtttt gccaacccta agncatnggc tggcaatgga ntgnnttttc     900
caatagaanc aaaccccggn tntttttttgg ggggnatcag ggttaagggn nttggcaaaa    960
nnaaannggc ncnnggnaaa aatttttccc nggtntatcn aaanncccca aagcttttng    1020
```

caan 1024

<210> 40
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 40
nggacgcatg ctcgagcggc cgccagngng atggatntng tgcagaantc gccctttcat 60
gcctatgatc ccngcacttg gngaggccga ggatctcctc tctgggggat cacttgaggg 120
caggagttaa gagaccatcc tggccaccat gatgaaaccc tgtcnctact nnacatacag 180
gaagnagctg gncgngntgg catactctta caatcccagc tacttggnag gntgangcag 240
ganaatcact ngnacctang aagcagaggn tgcatntgnn ccaanancac accactatac 300
tntagcctgn acgacagagg tgntgataan agcnggaccc ctgactatat ncaggntttt 360
ctgacntnna nnancncatc taaatnctac gccgtntgag gtcgcntagg ttangtagnn 420
natnctnatt tatgaccaat atgntgtnan acggcntnnt gntnaaaant tntacagnan 480
ggcngnctac nttncttata atgnggaaaa cggtgnctga natncangtg nnnnngtccn 540
nttnntggna agaggnttng aaanncanca gtgcaccttn tgaactctac nagnagcttn 600
tgaagctaac naagcnttaa natnagatgg cntgntagga ctgtacnngc anggaaagat 660
tcacaaaact ggacattctt naccgagata ngntcttgct ttaccgggga ggacnnntcc 720
aaggntgtnt naagagggac agtcagctta gtnntgctng ggtagagaaa accangactt 780
natntgtgag cttgatnggc agaacctggn nanccttgga agagcntnga ttgnccngat 840
ccctgaaagg gcnnncttna ccctatcggg gaccttnnna acctcttang tggcacgcaa 900
ggcacnaacc nggcncnttt caagaatcnc nggaatcnag gccccttttct tgggntnanc 960
cngnnnnncc cgttnagncc cncgggnaaa anntcttggg nntttccaat cccngnggnn 1020
nttt 1024

<210> 41
<211> 1004
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1004)
<223> n = A,T,C or G

<400> 41
ggtnnnntta atcatcgccn gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgcccttag cggccgcccg ggcaggtact tcccaccact ggaaatgtta 120
gcataaaaga acttggagag gaaaaaagta ttaacaaaac tgcagtctgc actctttaaa 180
cctgtttaag gctcttcatc ctggttagca aaaggtgtga atgtaatgtg atggaattta 240
aaagttttat gagaccaggc acagtggctc acgactgtaa ttccagcagt ttaggaagcc 300
gaagtgtgca gatcacctga ggtccggaga ccagcctggc caacatggtg aaaccctgtc 360
tctactagaa atacaaaaat tagccaggtg tggtggcggg cgcctgtaat cccaactact 420
caggaggctg aggctagaga atcacttgaa cccagcaggc ggaggttgcg gtgagtcgag 480
atcacgccat tgcactccag cctgtgcgac aagagcgaaa ctctgtctca aaaagatttt 540
ataagaaagc agagcttttc cttgaagctc ttttgaagtg gtagcttaat tagtattttg 600
ntgaaaatac tttaaagatg cctagtgaaa agcctactaa agtgctgtga aaaatggggt 660
ttanaacatt ttattttcan gctttatggc ctattttcca ttgnggcaag tgcaaaacta 720
ccctggccca aangaagggc agagaacata attacctctt anggcacatt tcattctttg 780
cagctttgct taatccagtn gctaagttct ttacctnaac cctgnaggna ttgaacntta 840
ttnccatttn ngnaaaaggg tcaccctntt nnnacaatnt tncannanct ttttnggaag 900
ttanccnttg gccttaaaan ttnaaaantc cntntggnnt tccctttatn ccccnnangg 960
gnnnantang gnntggattt ttaanggncc ttggccngaa cccc 1004

<210> 42

<211> 1020
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 42
```
nnnnnnnnnn nnnnngattg ggccctctag atgcatgctc gagcggccgc cagtgtgatg      60
gatatctgca gaattcgccc ttagcgtggt cgcggccgag gtacctttga taattcctag     120
acctctattt tcattctgtg tattaatgtg aataacagat ggatatttta atatttaagg     180
cagatggtaa actttcctat aggtcttgtg agacttcgtc ttataggctg aacaccattc     240
acaaaatgta ataatgcttc attccttcag gttgaggtaa agaacttgag caactggatt     300
agcaaagctg caaagaatga aatgtggcct aagatgtaat tatgttctct gcccttcctt     360
tgggccaggg tagttttgca cttgacacaa tggaaaatag gccataaagc ctgaaaataa     420
aatgttctaa accccaatct cacagcactt tagtaggctt ttcactaggc atctttaaag     480
tattttcaac aaaatactaa ttaagctacc acttcaaaag agcttcaagg aaaagctctg     540
ctttcttata aaatcttttt gagacagagt ttcgctcttg tcgcacaggc tggagtgcaa     600
tggcgtgatc tcgactcacc gcaacctccg cctgctgggt tcaagtgatt ctctagcctc     660
agccttctgg agtaagttng gaatacaggc gccccgncaa cacacctggc taaattttgn     720
atttctagta naanaccagg ttttnancat gttggncaag gctggtcttc cggaaccttn     780
angtgatctg gacacctttg gntttcctaa actgggtgga aattancagc gggaaccnct     840
ggggcctggc tcattaaacc tttaaaatnc cttnccattc anttcncacc ttttggtaac     900
cccgnatgaa aacccttnaa ccgggtttta agnangcnna nnngggnnat ttgtaaaact     960
ttttccccnt tccaagtcnt ttaagccaan nntttnccng gnnnngggan ccctnccggc    1020
```

<210> 43
<211> 1020
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 43
```
ggagnnnntt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttactgctt tgtcttcaag     120
gcctagtgta ataattaaca tctagtatgt gtttgatgga tagccaattt ttgcttcatt     180
ggtatgttgt taccacagtc attggtagag tcaatatatg aatgaagaaa gtataacaaa     240
tttgccctct agtagagtac tttttttttt tttttttttt ttttgttttt tttttttttt     300
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt     360
tttttttttt ngnnnttttn ncnttttttn aannaaaaan cggcccnann accnnccnnc     420
nnnttttttt nncnggccnn ccnggnttng gggnngggnn cnttnngggc cnnnnggncn     480
ctttttttccn naagggtttt ggggttttng gggnaaantt tnggnncnan nnnggcccna     540
aaaaanttnn gnccnanaan cgcnntttcc nannnnttnn cnttggggcc caaaaanttn     600
cgnaaccccn tgggcnnaaa gggcnttgnt ttttttgggg nncccnaaac canggggggg     660
cnnaaaaaat gnccccttgaa nttttttaaaa aaccctntgg naaaancccc nngggttccc     720
ccnnnnnccc ttantttttnn acanaanggn nnaaanggggg ncccnnnaaa naccnttngg     780
ggccnttttt tnacaaattt ggggntttnn aaaggggttt tnnggggggc cctntatncc     840
ccnaaaaang aaagggnnnc ccccccccnnn nnnnnnnncc cnaanccccc ggnnntttttn     900
ccnggggggg cccnnnaaaa gggggnaant ttnggnaaan nccnnnnncn ggggggnccn     960
ttnaaanntc nntttnanng gggcccnnnn nncccccnnnn anngggggggn nnaaaaaccn    1020
```

<210> 44
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 44
nnngnnnnnn nngattgggc cctctagatg catgctcgag cggccgccag tgtgatggat 60
atctgcagaa ttcgcccttt cgagcggccg cccgggcagg tacgcggggc tcggcgctgc 120
ctacggaggt ggcagccatc tccttctcgg catcatggcc gccctcagac cccttgtgaa 180
gcccaagatc gtcaaaaaga gaaccaagaa gttcatccgg caccagtcag accgatatgt 240
caaaattaag cgtaactggc ggaaacccag aggcattgac aacagggttc gtagaagatt 300
caagggccag atcttgatgc ccaacattgg ttatggaagc aacaaaaaaa acaaagcaca 360
tgctgcccag tggcttccgg aagttcctgg tccacaacgt caaggagctg gaagtgctgc 420
tgatgtgcaa caaatcttac tgtgccgaga tcgctcacaa tgtttcctcc aagaaccgca 480
aagccatcgt ggaaagagct gcccaactgg ccatcagagt caccaacccc aatgccaggc 540
tgcgcagtga agaaaatgag taggcagctc atgtgcacgt ttctgttta aataaatgta 600
aaaactgcaa aaaaaaaann nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 660
nnnnnnnnnn nnnnnnnnnn nnnnnannna aancccnnnn aaaanannnn nnnnaaaaag 720
gcttntttta angggcaaat tgggaaacct ttttnattca aaaatggctt ttnccangga 780
ctggggacca nnttncccng gggnccaaaa ttgggntttc ctttaanccc nttncnnaan 840
gggaattttt nccettgggc cttgaaaaac naagcnnnna aaaagncccct tgggnnggaa 900
acccctttng ggggaatttc cncnccnttg ggggggcnnt ntnnnnnggg acccnanttg 960
gncccaantt ttggggaaaa nnngggnnaa aaagggnnnc cctgggggaa aatgttnccc 1020
ccca 1024

<210> 45
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 45
ggagnnnntn aatcatacgc cagcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacggcgca ttttgtgcac 120
acaaaatgtg cgcacacaca cacacacaca cacacagaca ctcctgcaca tggcctgtta 180
aagaactaca agggaggtgg gacgcgggaa agtgtatggt gtgggtttgc atcgtctcat 240
cattgattct tctcatattt ttctctgatt agagaaacta aagagaattt tgtgagaaag 300
gcttgaaagt taatgagtta cttctaccaa agtgattaca agcagaaatc ctcagatgct 360
gtagagatgc tgacccacac atccttagct caaggaagcc cctcgcatta gtcaccttca 420
gccatcagca gcctccacca ttaaccccag tgtgctgtat aaaaaatact ttctacatgt 480
gcccaaattt gaaaagttag gaagcactga tttcaaagca aatcattcac atttgaactg 540
tcttcagtgt acctcggccg cgaccacgct aagggcgaat tctgcagata tccatcacac 600
tggcggccgc tcgagcatgc atctagaggg cccaattcgc cctatagtga gtcgtattac 660
aattcacttg ccgtcggttt tacaacgtcg tgactgggaa aaccctgcg ttacccaact 720
taatcgncnt ggagcacatt ccccntttgg ccnactggcg taattaacca aaaaggnccg 780
gaccgaatcg gccntttcca acaagttggg ccaacctgaa tnggcnaaan ggcccccccc 840
tgtaaccggn gccattaaac ccccgncggg nnnntngggg tacccccaac ggggaccggt 900
taacttggcc anggccttaa ggcccggtcc ttttggtttn ttncctttcn tttttngccc 960
ntttnccngg nttttcccgn aaagntntaa aaaggggggg tccccnttta ggggtcccaa 1020
taaa 1024

<210> 46
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(1024)
<223> n = A,T,C or G

<400> 46
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nnngnnnnnn nnnnnnngaa ttgggccctc tagatgcatg ctcgagcggc cgccagtgtg 60
atggatatct gcagaattcg cccttagcgt ggtcgcggcc gaggtacact gaagacagtt 120
caaatgtgaa tgatttgctt tgaaatcagt gcttcctaac ttttcaaatt tgggcacatg 180
tagaaagtat tttttataca gcacactggg gttaatggtg gaggctgctg atggctgaag 240
gtgactaatg cgaggggctt ccttgagcta aggatgtgtg ggtcagcatc tctacagcat 300
ctgaggattt ctgcttgtaa tcactttggt agaagtaact cattaacttt caagcctttc 360
tcacaaaatt ctctttagtt tctctaatca gagaaaaata tgagaagaat caatgatgag 420
acgatgcaaa cccacaccat acactttccc gcgtcccacc tcccttgtag ttctttaaca 480
ggccatgtgc aggagtgtct gtgtgtgtgt gtgtgtgtgt gtgcgcacat tttgtgtgca 540
caaaatgcgc cgtacctgcc cgggcggccg ctcgaaaggg cgaattccag cacactggcg 600
gncgttacta agtggatccc gagctcggta ccaagcttgg cgtaatcatg gncatagctg 660
nttcctgtgt gaaattggta tccgctcaca attccacaca acatacgagc ccggaagccn 720
taagtgtaaa agccctgggg tgcctnatga gtgagctaac tccattaaat tgcgttgccg 780
ctcactggcc ggtttcagtc cggnaaanct gcggncnact gcantaatga atcggncaac 840
gcccccggga aaaaagcggt tgcgaattgg gccctntttc cctttcttgg ttaatggact 900
ccntnngnct tnggccnttc ggnttnggnn naacgggatt aanttnnntt naaagggggg 960
naanacgggt ttncccnana aatcnggggn aaaccccccng gaaanaaacn ttggncccaa 1020
nggc 1024
```

<210> 47
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 47
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ggngnnnnnn aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtgcat ctgaacattg ccaagcccta 120
ggacattccg tagagcttgg ggattctgga ccaattggtt cagacaggac acgaaatgcc 180
tgtttgatgg gttctgcaat taaacaccca actactctct tttcatcaga tataaaaaga 240
aaagttttta ttttgtttgg acatttagga acaacttgct ggaagcccaa ttcattatca 300
acaagttctt ggacatcttc tacctttttg atagcaaagc ttggatcatg tggcagaacc 360
aacacgattt tcccatccca aaactctgct actacacgtt ctttcttcca acccacatat 420
ttgattcctt ccagaaacct gtggtgatgc tgtacctgcc cgggcggcaa gggcgaattc 480
tgcagatatc catcacactg gcggccgctc gagcatgcat ctagagggcc caattcgccc 540
tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga ctgggaaaac 600
cctggcgtt acccaactta atcgccttgc agcacatccc cctttcgcca gctggcgtaa 660
taagcgaaga ggcccgnacc gatcgccctt tccaacagtt gcgcagcct gaatggcgaa 720
tggacgcccc ctgtanccgg cgcattaaac cgccggcggg tnnttggggt accccncacg 780
gggaccggta cactttgnca agggccctaa cggcccggtc cntttcgctt tcttnccttt 840
cntttnttgg ccacgttngn ccgggttttc cccgtnaagc ttttaaaatn gggggcttcc 900
cnttttaggg gttccnaatt aanggcttta cgggaccctt gaccccnaaa aaactttnnn 960
tttnnggggg gnggggntnc ccntaggggg ccattgnccc ttgnnaaaaa anggttttn 1020
nncc 1024
```

<210> 48
<211> 1017
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1017)
<223> n = A,T,C or G

<400> 48
gnnnnnnnga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttgccgc ccgggcaggt acagcatcac cacaggtttc tggaaggaat 120
caaatatgtg ggttggaaga aagaacgtgt agtagcagag ttttgggatg ggaaaatcgt 180
gttggttctg ccacatgatc caagctttgc tatcaaaaag gtagaagatg tccaagaact 240
tgttgataat gaattgggct tccagcaagt tgttcctaaa tgtccaaaca aaataaaaac 300
ttttcttttt atatctgatg aaaagagagt agttgggtgt ttaattgcag aacccatcaa 360
acaggcattt cgtgtcctgt ctgaaccaat tggtccagaa tccccaagct ctacggaatg 420
tcctagggct tggcaatgtt cagatgcacc tcggccgcga ccacgctaag ggcgaattcc 480
agcacactgg cggccgttac tagtggatcc gagctcggta ccaagcttgg cgtaatcatg 540
gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc 600
ccggaagcat aaagtgtaaa gcctggggt gcctaatgag tgagctaact cacattaant 660
gcgttgcgct cactggccgc tttccagtcn ggaaacctgt cgtgccagct gcattaatga 720
atcggncaac gcgccgggga aaaagcggtt gcgtaattgg gcgctctttc cgctttcttg 780
nttacttgac tccttgggct tcggccgttc ggntgcggnn aacggnattc aacttactca 840
aaaggcggna atacggtatt cccngnaatc nggggataac ccccggaaan aactttgacc 900
naaaggcccc caaaaggccc ngaacccgna aaaaagggcn cgnnnnnnnn ggggtttcct 960
aaggttccgg ccccctggnn aggtttccca aaaatngnnn cctttnannn nnnnngg 1017

<210> 49
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 49
ggngnnnnnn anatnaaacg ccagcttggt accgagctcg gatccctagt aacggccgcc 60
agtgtgctgg aattcgccct tgagctggcc gcccgggcag gtactgaaat tactctgaat 120
tcagaaatgt aagtatatgc agctaggtca taaagacact gctttagaga agacatgtat 180
tagtggaatg gaacaggtaa catctttgag aagtcaatga gttctgcatg cagggatttc 240
accatcggaa tgatggcaag aatgatgcct gcctgtgtgc ttctcagagg acgtataaag 300
ccactgagga tgagtgctac agtgcttgtg aattgtgggg ccacagacat ttaagttggc 360
attgcttttc tcctcctctg cttaatccac ctttataaat atggcagatg gcttaagaca 420
ggcatcatca gcatctctgg agatgtgggc tcagagggca agtgggggcc gtgggggttt 480
ccactagagg gagggaagtt tctgtttccc atgtgttagt tgtagttgtc tttgtgcttc 540
accagaaaag aggtagagtg cgcaccttca cactaagagc ccgaaattgt gggtcagtac 600
ttttttttt ttnnntttt tggtnntttt tnnnnnnnnn nnnnntnnnn ngnnnnnnnt 660
tnnnttnnnn ngnnnnnnnn nnnnnnnnnn tttnntnngg nnnncncttn nnnnnnaann 720
nngnnnannn ncnnnnnnnn tngnnnnnnn nnnnncnttn ngggnnnang ncccnannnn 780
nccnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnccnannn nnnnnnntnn 840
nnnaanncnn tnnnnnnnnn nnnggnnnnn nnnnttnnan nnnnnnnnnn nngnnnaann 900
nnnnnnnnnn nnnnnnnnna annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 960
nnnnnnannn nnnanngggn nnnncccnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntt 1020
nngg 1024

<210> 50
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 50
ggagnnnntn nntncngant gggccctcta gatgcatgct cgagcggccg ccagtgtgat 60

ggatatctgc agaattcgcc cttagcgtgg tcgcggccga ggtacactga cttgagacca 120
gttgaataaa agtgcacacc ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaanaana ntaaaaaaaa tttnaaggta aagntnncnn ntnaaaatct tttagggnna 300
tccntatann nnttttcgnn tntttnnngg ntngncctct nntnccnnnt tttttnggna 360
ancccnaann cccngnctta ccnnatgngn canunttaaa anggtncntt nttnngngga 420
nctcannncc cccgccnttt tnntnngggg ggnttnncca nnggnggnna aatgcncngc 480
tnatnaanan gggnttnntc cnaaatnngn naanccctga ggnggnaanc ntnntggnct 540
tnntncngat tnngnnaccc ccncnngcag anntcnttgn nnccttantn ccgggggnta 600
naccccttcct ttaaaancnc nntgntntna aaaannnttt ncctgancna tcgggntaaa 660
ncnnnttttt tgaaaaccnn ggctttttnn aanangctcc gntnggcnaa ctttggggaa 720
naaggnnttt tttaaggcct tgctttttag ggccanccta anggngannn ncngttgnct 780
tgnnngatgg tttttagggn ttcccgggtg ggaccnttnt tgggggggaaa ttttggnccn 840
aggggntccc ctnnaagaaa tccnnnttcc nggncncnaa ttnccnnaaa aattnngggn 900
ccnaaanntt tnattgggaa ggncctttgg ttgccccnnt aaanggnccn naaaccttta 960
aangggggggn gcntttaatg gcncctttcn ggncccnaaa aaanggggnc cccccnnttt 1020
nagg 1024

<210> 51
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 51
gngnnnnntt aactcccgct tggtaccgag ctcggatccc tagtaacggc cgccagtgtg 60
ctggaattcg cccttagcgt ggtcgcggcc gaggtacttt tttttttcttt tctttctttt 120
tttttttttt tttaattttt gagatggagt tttgctcttg ttgcccacgc tggagtgcaa 180
tggcgcaatc ttggctcatt gcaacctcca cctcccggat tcaagcgatc cttctgcctt 240
agcttcccaa gtagctggga ttatagacgt gtgccaccat tcccagctga tttttgtatt 300
tttagtagag atggggtttc accacgttgg ccaggctagt ctcgaactcc cgacctcatg 360
tgatcctccc accgcagcct cccaaagtgc tgggattaca ggcgtgagcc accatacccg 420
gttgattgta gacttttgat tggtatttac aaggacccat gagaggcaac aaagagaagt 480
tgtcaagaga acagaccctg agaccaatag tttggctcaa gctctggctc cctaacttcc 540
taccagtttg accttgggca agttacctaa catctttgtg cctccatttt ctatttgtaa 600
aaggaaacta atagtagtgc ctactttata atagagttat tacaaatatt aaatgagtta 660
atatttgtaa agtaattaga aaaatgcctg gcacttcaaa agcagccttc atttattctt 720
tggaaataat tttaaatgaa ttcaagggtt atatgtagct tttaggcata tatncctaaa 780
tggcactgta aaactgcana aatatccgat ctttaaaaat ttttgggtaa atttatcata 840
atatggnaac caaatcccat ttaatggctt ttaggggtan ccgatnaaaa ccngaagttt 900
gcagtttaag ccncttatgg aangggaccc gaaattccaa gganccccann gggaaaaaac 960
cccnngagga atnttggccg ntttaantta aancctttgg gtnntttaag nncctaaaaa 1020
nttt 1024

<210> 52
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 52
gngnnnnnnt tnngnttcng antgggccct ctagatgcat gctcgagcgg ccgccagtgt 60
gatggatatc tgcagaattc gcccttcgag cggccgcccg ggcaggtact tcaaaactat 120
tcataagcaa aaatcagtgt caaaaatatt tagtaactta aaaaaaacaa aaagtataag 180

tagagacgga caagaactcc tcctgctttc tcccactggg ctcatcgtat ttctgttcca 240
ttacataaga gactaaaact gacaaactct gttttatcgc taacacctaa aagcaataaa 300
tgtgatttgt taccatatta tgataaaatt taaccaaaaa attttaaaga tcggatattc 360
tgcagtttac agtgacattt atgtatatat gcctaaaagc tacatataaa ccttgaattc 420
atttaaaatt atttccaaag aataaatgaa ggctgctttt gaagtgccag gcatttttct 480
aattacttta caaatattaa ctcatttaat atttgtaata actctattat aaagtaggca 540
ctactattag tttcctttta caaatagaaa atggaggcac aaagatgtta ggtaacttgc 600
ccaaggtcaa actggtagga agttagggag ccagagcttg agccaaacta ttggtctcag 660
gggtctgttc tcttgacaac ttctctttgn tgcctctcat gggtccttgt aaataccaat 720
caaaagtcta caatcaaacc gggtatgggg ctcacgcctg taatcccagc actttgggga 780
ggctgcggtg gggaggatcc ccatganggt ncggagttcg agactagcct gggccaacgt 840
ggnggaaacc ccatctntac taaaaattcc aaaatcanct ggggaaggng ggcacacgtc 900
tataatccca cttccttggg aagcttaagg ncnnaaggac gcttggaaac ccggaanggn 960
gnggttcaat gganccccaaa atgngccatt ggnctttcnc gngggccaac angagccaaa 1020
ntcc 1024

<210> 53
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 53
gggnnnnnnn tnncttaacg cccgnttggt accgagctcg gatccctagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacattactt ggtgttaaca 120
ttgttggcag tggtagcccc ttttcagaaa gcaacttgct gtaagtcagg gtgtccgttc 180
caaccttcag ctagtgaaaa ggtagtaaca aatggtaaac aagagaatga ttgtttaaac 240
ctatctgtgg acacttaatg caactgttta aaaatgataa tcacgagtta tgtagcaacg 300
tggaaatata tttacagaac attaagtgga gaaagcagga cacgaaagta tatttatact 360
acagttataa ctcaacagtt catttatatg ctgttcattt aacagttcat ttaaacagtt 420
cattataact gtttaaaaat atatatgctt atagtcaaaa gctgttgtgg tgttgttgtt 480
gtaggcttat agttgagcat tattttctta aatttcttga atgttcttta tggtagtgtt 540
actaaaaagt ttatgatcac attttcattg tgaacataat ttgaactcat tatcacacac 600
ttggaaaata cagaaaagtg gaggaaaaaa aatcatatcc ccaccatcca aagacatata 660
ctctcctctt atcttgntca ttcttggttc tgngcacagg tttatgatta taactgngtc 720
aaaatgtata ttcaaaatag ctggtacatt accttttgngg nattatgggt aaatctttca 780
ctttaatttt ttcaaaggtc cctatnataa tggcccggat aaccgnggga tttaaggggg 840
ctcccatggn gggcataatn catacccnga ggaaaaattn naaaattaag gnaantattt 900
ttaaaaaatt ncctatattt ccccaaaacct aacaactact ggtaaaaatn ttggaccggn 960
tccccctatt ntnggttaan ggcccaccct ttgggnaaaa ccggggtnaa aaattggggc 1020
ctaa 1024

<210> 54
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 54
ggagnnnnnn ttnngtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg 60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtacttttt tttttttttt 120
tttttttttt ttacatttat gcatacttat cactaacacc ctaataatca cagactagtg 180
cacagatcaa gatgttaaca gttaattgtt gttgggtgtt gggaatatgt gtgaattttc 240
tttactgaat ttccaaagtt ttgtatgagt atgtattata tttgtaatgg aaaatacata 300

cataaaattt attaccaaaa caccaaagat tatttaagga atttgagaca aaatatttaa 360
ccaaattccc acaatgacaa cactatttta gttattttcc acatcttttc atttaagact 420
ttatgcacac atatttaaca ctgttatcac aagcgtgtgc actgaaacaa gatagaggaa 480
acagatcaag atgttagcag tagttgttag gtgttgggaa tataggtaat tttttaaaat 540
aatttacttt attttctaat ttttcctctg ggtatgtatt atgcacacca atggagacac 600
acataataca ctgttatcag gacattatta tagggaacat ttgaaaaaat taaagtgaaa 660
gtatttaacc ataattccac aaaggtaatg taacagctat tttgaatata cattttgaca 720
cagttataat cataaacctg tgcacagaaa cnagaatgaa cnngattaga ngagagtata 780
tgtctttgga tggtggggat atgaattttt cctncacttt tctggatttt nccagtgtgn 840
gaaaaatgag ttccaaaata tggtcncaat ggnaaatgng ancntnaacc ttttagtanc 900
ccttnccttn aggaacattt caggaaantt tannaaaata anggctcaac ttttaggcct 960
acannancaa ccccncaaaa ggnttttgac tntttanccn tntatatttt taaccggttt 1020
taan 1024

<210> 55
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 55
gnngnnnnnn ttaactccag cttggtaccg agctcggatc cctagtaacg gccgccagtg 60
tgctggaatt cgcccttagc ggccgcccgg gcaggtacct cacatgggaa acatgggaag 120
taaaaccacc tgaggagcct cttgatggtg agtcaggctg ttcctcgaag agtaggctgt 180
gactgccaaa ctttgtaggt taaggagtat ttataatgat ctttgaggaa actgcaactg 240
acaattgagg gaaaaaaatg ttagttcatg actgcaaaat acatgacaga atcacaaaaa 300
ctattttaca agtttaaaaa acaaacctga tgctgatgca tggcaggcga accccaaagt 360
ggggcttagc ctgcaagggt tcttggcttc acccaggaaa ggattcaagg gcaagccagt 420
ggtaaggtgg aagaaaacac ctttatcaaa gcaacactgt tacagctcct gtggggtcac 480
agctcagtga ctgctcccag ggttgcccca taggcagggt gccgagagta gcagctgagc 540
ccagttttgc agtcatatgt atacctactt ttaattacat gcagattcag gggtggtttg 600
cgcagaaatt gttaggaaaa gggtggtaac ttttgggtca tcaggtcatt gccgcttaaa 660
gtggtggtaa tgcctgagtt ttgccatggc aatggtaaac tgacaaggca cgctgcttgg 720
tgtgtcttac agaaagctgc ttncgctctg ncettggtta nctagccctc gancntttgg 780
ttgtaaatga accaagagaa gtcaccggcc cttggcgttt tcttcccaga agtacccttg 840
ggccgggaan cacgcttaag ggccaaattc ttgcagatat ccatnacact tggcnggncc 900
gnttcancct tgcattttaa aagggcccaa tttgnccctt taaanggagt cgantaccaa 960
ttnnnntggg ccgcgtttta acaacgtnnn ggacttggga aaaanccctg ggttacccca 1020
antt 1024

<210> 56
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 56
gnagnnnnnn ttnngttnca gantgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtact tctgggagaa 120
aacgccaagg ccgtgactct cttgctcatt tacaaacaaa agatcgaggg ctagctaaac 180
aaggacagag cggaagcagc tttctgtaag acacacccag cagcgtgcct tgtcagttta 240
ccattgccat ggcaaaactc aggcattacc accactttca gcggcaatga cctgatgacc 300
caaaagttac cacccttttc ctaacaattt ctgcgcaaac cacccctgaa tctgcatgta 360
attaaaagta ggtatacata tgactgcaaa actgggctca gctgctactc tcggcaccct 420

gcctatgggg caaccctggg agcagtcact gagctgtgac cccacaggag ctgtaacagt 480
gttgctttga taaaggtgtt ttcttccacc ttaccactgg cttgcccttg aatcctttcc 540
tgggtgaagc caagaaccct tgcaggctaa gccccacttt ggggttcgcc tgccatgcat 600
cagcatcagg tttgnttttt aaacttgtaa aatagttttt gtgattctgt catgtatttt 660
gcagtcatga actaacattt ttttccctca attgcaagtt gcagtttcct tcaaagatca 720
ttataaatac tccntaaccc tacaaagttt ggcaagtcac agnctactct ttgaggaaca 780
agcctgactt accatcaaga agcttccttn angggggntta cnttccatgg tttcccatgg 840
tgaagganco tgncccgggc ggccgnttaa gggcgaaatt caacacactt gggnggccgn 900
tnnnttaang gatccnaact tggganccaa annnttgggg naaannatgg gnnnnnaact 960
ggnnnccggg ggggaaaatg gtatnccgnt tccaatttcc ccncnanntt tnnaancccg 1020
gaan 1024

<210> 57
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 57
gngnnnnntt nantnaacgc cagcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actcatcact gacttgaagc 120
ttagtatctg gcttccttaa ggatgtaact ttcatgtaac agattaataa cttatatgaa 180
aaccaacaca accatatgtt tagggctgga aagggccatg acgcctggtc atttttcctg 240
ttttacctta ctcttatgtg tgtcacactt catcaattcc ggaaacagtt tctggagatc 300
tcctcattac ctcttttaca atcacctcac tccagcatgg tgtctgttac ctcttcccac 360
ttgtgacaat gtctagtaag gtccactctc cattctgtgt gatgaccact tattacaacc 420
ctcagaatag gggacagtgg tgtgcccccct gcaatacaat ggtttctatc tcctgatact 480
tttattacac ctctagcagg atgtcttgtg atcctcctta ttgatttttc cctcacgatg 540
atgaacaatt atctccccgtt actcacctag cagtatctaa ctgtccctaa cacagcatgt 600
gggaatgccc tcaatacggt ggatgctgnt aactttcttc cttcccctca ggcaatggcg 660
gtgacttaca atgaaccata atggccacat ttcccaactg natttggaa cctcttctgn 720
ccccttcttt ctagganccc agttaaaaaa aaaaaaccaa aactagcccc aatgnctgtg 780
atgcccatta atcacttacc cagggctgan ccctncatta aantttttgat gggatctctt 840
tggnttccca attggccgtt naacccaagn ctgntggatt cccaanttnc cccattgntt 900
taatgcgggt cccttaanca nccccttggnt actggacctg gccngggngg gcccttttaa 960
aaagggcaaa ttntggagaa aatnccttnc acttgggggg ccnttnnaac atggcntttt 1020
aang 1024

<210> 58
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 58
gngnnnnntt nngtttggcc ctctagatgc atgctcgagc ggccgccagt gtgatggata 60
tctgcagaat tcgccctttc gagcggccgc ccgggcaggt acagtagcca agggtgacta 120
aggaaccgca tgaagcaatg tgggaaattg ggaatcagca gacattgggt taacgggaca 180
atggggagcc aagagatacc atcaaaattt aatggagggg tcagacactg tgttagtgat 240
taatgggcat caacagacat tgggctagtt tttgtttttt ttttttaact ggggtcctag 300
aaagaagggg acagaagagg ttccaaaata cagttgggaa atgtggacat tatggttcat 360
tgtaagtcac cgccattgcc tgaggggaag gaagaaagtt aacagcatcc accgtattga 420
gggcattccc acatgctgtg ttagggacag ttagatactg ctaggtgagt aacgggagat 480
aattgttcat catcgtgagg gaaaaatcaa taaggaggat cacaagacat cctgctagag 540

```
gtgtaataaa agtatcagga gatagaaacc attgtattgc agggggcaca ccactgtccc      600
ctattctgag ggttgtaata agtggtcatc acacagaatg gagagtggac cttactagac      660
attgtcacaa gtgggaagag gtaacagaca ccatgctgga ntgaggtgat tgtaaaagag      720
gtaatgaaga gatcttccag aaactgtttc cggaattgat gantgtgacc cnccttaaga      780
ntaaggtaaa acaggaaaaa tggnccaggc gtnatnggcc cttttcagnc cttaaccttt      840
attggtgggg tggtttcata taagttantt aatctggtnc cctgaaagtt tccttccttt      900
anggaaaccc gantcctaan cctttnaagt ccnnggatga gacccttggn ccgggaaccc      960
cccttaaggg cgaaattccn ncccacttgg gngggccntt nncttaaggg acccaacttg     1020
ggcc                                                                  1024
```

<210> 59
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 59

```
gagnnnnnnt taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt       60
gctggaattc gcccttagcg tggtcgcggc cgaggtacct ggttttcttt caactcttca      120
atttcccatc ttccatcgta tattgaaatt tcctcatcca tgtcatcttt ctttgctttt      180
gataagaccc atccagccaa ccttccacta tcaaaagttt ctgcaaaata tacttctcct      240
ataggttgag gtgtcttata tttaatctct gaggaaagtt cactttcatt aacatcaatt      300
tcttctgaat ttcttcaaa gtcttccgtc tcaacatcat catccataaa ttctgcatta      360
attgagatga acagaagacc caaacataac caaaaggctt ggaaatgcat attgattatc      420
tctcttgcgg cctgttttcg gcagtgacag ctcagatgtc caagtcgttg ccacttggtc      480
cccgcgtctc ttcagaccag tccccccgc gtacctgccc gggcggccgc tcgaaagggc      540
gaattctgca gatatccatc acactggcgg ccgctcgagc atgcatctag agggcccaat      600
tcgccctata gtgagtcgta ttacaattca ctggccgtcg ttttacaacg tcgtgactgg      660
gaaaaccctg gcgttaccca acttaatcgc cttgcagcac atcccccttt cgccagctgg      720
cgtaataacg aaaagcccgc accgatcgcc ctttccacag ttgcgcagct gaatggcgaa      780
atggaccccn ccctgtancg gcgcattaan ccnccngcng gttnntgggg tacccccaac      840
ggggaccggt acactttgnc aagggcctaa cgnccggttc ntttggtttc ttnccttcn      900
ttnttngcac gttngnccgg nttttcccgt naagctttaa aatngggggc ttccccttt      960
angggtcccn aataaaggtt ttacggganc ttgaaccccc aaaaaacttt gnnttnaggg     1020
ggga                                                                  1024
```

<210> 60
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 60

```
gnnnnnnttn ngttncngaa ttgggccctc tagatgcatg ctcgagcggc cgccagtgtg       60
atggatatct gcagaattcg ccctttcgag cggccgcccg ggcaggtacg cggggggac      120
tggtctgaag agacgcgggg accaagtggc aacgacttgg acatctgagc tgtcactgcc      180
gaaaacaggc cgcaagagag ataatcaata tgcatttcca agccttttgg ttatgtttgg      240
gtcttctgtt catctcaatt aatgcagaat ttatggatga tgatgttgag acggaagact      300
ttgaagaaaa ttcagaagaa attgatgtta atgaaagtga actttcctca gagattaaat      360
ataagacacc tcaacctata ggagaagtat attttgcaga aacttttgat agtggaaggt      420
tggctggatg ggtcttatca aaagcaaaga aagatgacat ggatgaggaa atttcaatat      480
acgatggaag atgggaaatt gaagagttga aagaaaacca ggtacctcgg ccgcgaccac      540
gctaagggcg aattccagca cactggcggc cgttactagt ggatccgagc tcggtaccaa      600
gcttggcgta atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc      660
```

```
cacacaacat acgagcccgg aagcataaag tgtaaagccc tggggtgcct aatgagtgag     720
ctaactcaca ttaaatgcgt tgcgctcact ggccgctttc cagtcnggaa accctgtcgt     780
gccagctgca ttaatgaatc ggccaacgcc ccgggggaaa aagcggnttg cgtattgggc     840
gctcttccct ttcttgntta cttgactcgc ttgggcttcg tcgttcggct gcggcnaacg     900
gnatcagctt actcaaangc gggaaatacg gtantcccca gaatccnggg gattaccccn     960
ggaaaagaac ctgtgagccn aanggccccc aaanggcccn gaaccntaaa aaanggcccg    1020
tnnn                                                                 1024
```

<210> 61
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 61

```
gggnnnnnnt tncttacacg cccgcttggt accgagctcg gatccctagt aacggccgcc      60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtacaaatg gttttatgtc     120
accaatttg  ctgcaagaat gggaactgct tttaaatctg taaatagctc ttaacatttg     180
ttgtatgcac tcttttctta ctatggctgt caacacttgt gtagggttta atttctaaat     240
tgttggcatg ttctttttct caggctattc agaagtaaca acatttttca tttcagacat     300
gcaatcacct attaatgatg aaatatttta ccactttggg aatatttaat tagtttagtc     360
atggagaata cttcccacat tttaagattt ttcaaatatc actgtcattt ctattttagc     420
atttatcaa  attattgctt ttttatttta taataaggct taagacagat tatagacctc     480
cttaagagat gagtttcttc ttctaaaaat gcatgttgat agaggactat ttaggctaat     540
cggaggaatc attaagaaag aaagttttaa cactgtttat ccctatctgc tttccttgca     600
ctttttctgt gaaaaatatt ttctgtttgc aaaatcttcc ctgagttctg aacccagcac     660
catcagtacc tcggccgcga ccacgctaag ggcgaattct gcagatatcc atcacactgg     720
cggccgctcg agcatgcatc tagagggccc aattcgccct atagtgagtc gtattacaat     780
tcactggccc gcgnttttac aacgtcgtga ctgggaaaac cctgcgtta  cccaacttaa     840
acgcccttgc agcacatccc ccttttgncc aantgcgtaa ttaccaaaaa ggcccgnacc     900
gaacggccnt ttcccaaagg tggcncaacc ctgaaatggc aaatgggccc cccccttgaa     960
ccggngccnt taancccccc nccgggnntt tnggggtccc cccacggnga nccgttaaac    1020
ttgc                                                                 1024
```

<210> 62
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 62

```
gnagnnnnnn ttnngnttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct tagcgtggtc gcggccgagg tactgatggt gctgggttca     120
gaactcaggg aagattttgc aaacagaaaa tatttttcac agaaaaagtg caaggaaagc     180
agatagggat aaacagtgtt aaaactttct ttcttaatga ttcctccgat tagcctaaat     240
agtcctctat caacatgcat ttttagaaga agaaactcat ctcttaagga ggtctataat     300
ctgtcttaag ccttattata aaataaaaaa gcaataattt gataaaatgc taaaatagaa     360
atgacagtga tatttgaaaa atcttaaaat gtgggaagta ttctccatga ctaaactaat     420
taaatattcc caaagtggta aaatatttca tcattaatag gtgattgcat gtctgaaatg     480
aaaaatgttg ttacttctga atagcctgag aaaaagaaca tgccaacaat ttagaaatta     540
aaccctacac aagtgttgac agccatagta agaaaagagt gcatacaaca aatgttaaga     600
gctatttaca gatttaaaag cagttcccat tcttgcagca aaattggtga cataaaacca     660
tttgtacctg ccccgggcgg ccgctcgaaa gggcgaattc cagcacactg gccgnccgtt     720
acttagtgga tccgagctcg gtccaagcct tgcgtaaatc atggnccata ntggttcctg     780
```

nggtgaaatt ggtatcccgg tcacaatttc nccccancat acgaanccgg aagccntnaa 840
gngtaaaanc cctgggtggc ctaatgagtg aactaactca catttaaatg cgtgcgctta 900
ctggcccgtt ttccaatcng ggaaanctgt cgngcccact ggntttaang aatcggccan 960
gcccccnggg gaaaaaagng gttgcnnatt gggccctttt tcggttcctt ggttantgga 1020
atcn 1024

<210> 63
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 63
gagnnnnnnt taacnccccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtacat tgacttcatt actaaagaac 120
aaaaatgttc atttttgtcc cagtaaattg agactgcttg tacttttttt ttttttttt 180
ttttttttt ttattaaaat actgagtttt atttcacatg tatattttttg tctccccacc 240
atttccatgt ctgaccaccg ctactactat gtcctatcat aacattccat acatacttaa 300
aaccaagcaa agggtggagt tccatcttta aaaactaaac ggcattttgg acaacacatt 360
cttggcaata naacctggac aacatttatc aaacacggta gggaaagttc tcactctgca 420
ttataaaaag gacagccaga tatcaactgt tacagaaatg aaataagacg gaaaattttt 480
taacaaattg tttaaactat tttcttaaag agacttcctc cattgccaga natcttgaat 540
agcctcttgg tcagtcatcc ggaagcaatt cttcacataa ttgatgaatt tggcttccac 600
tttgggaaga gaaccacctt tttctatact tgcttgcatt tttgctttaa tgncttctac 660
agaactaggt ccttttggng ttttaggagt tttttcctgn ttcttgaagg attcttggcc 720
ttttganctt ggggttgaaa ganggntttg agtcttttca ttctgaattg acttttgggc 780
atttttggct ggagnatctc ggatagattt cttcactggg gctttttctt nagntttcct 840
catatcaaaa tcntcatcat catcanctt atnaanatcc cctttaatna anatcggnat 900
tnatntttat tnagcngcaa ggtttacttt ttttctgggg gaanctttgt tancccctt 960
caggggggcaa aaccggtttt ccaaaaatnc ccttaanaat ttnccaaanc cnccnccntt 1020
ttaa 1024

<210> 64
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 64
ggagnnnnnn ttnngtttcc gaattgggcc ctctagatgc atgctcgagc ggccgccagt 60
gtgatggata tctgcagaat tcgcccttag cggccgcccg ggcaggtaca gccaacggtt 120
tcccttgggg gctttgaaat aacaccacca gtggtcttaa ggttgaagtg tggttcaggg 180
ccagtgcata ttagtggaca gcacttagta gctgtggagg aagatgcaga gtcagaagat 240
gaagaggagg aggatgtgaa actcttaagt atatctggaa agcggtctgc ccctggaggt 300
ggtagcaagg ttccacagaa aaaagtaaaa cttgctgctg atgaagatga tgacgatgat 360
gatgaagagg atgatgatga agatgatgat gatgatgatt ttgatgatga ggaagctgaa 420
gaaaaagcgc cagtgaagaa atctatacga gatactccag ccaaaaatgc acaaaagtca 480
aatcagaatg gaaaagactc aaaaccatca tcaacaccaa gatcaaaagg acaagaatcc 540
ttcaagaaac aggaaaaaac tcctaaaaca ccaaaaggac ctagttctgt agaagacatt 600
aaagcaaaaa tgcaagcaag tatagaaaaa ggtggttctc ttcccaaagt ggaagccaaa 660
ttcatcaatt atgtgaagaa ttgcttccgg atgactgacc aagaggctat tcaagatctc 720
tggcaatggg agaagtctct ttaagaaaat agtttaaacc atttggtaaa aaattttccg 780
tcttatttca tttctgtacc agttgatatc ctgctgtcct ttttataatg cnaagtggag 840
aactttccct accggtttgg ataaatgttg gncaggttct attgcccaag aatgtgtgnc 900

ccaaaatgcc cgntagtttt tnaagatgga acttcacccn tttgcttggn tttaagtatg 960
nntngaangt ntgatnggac cntatnntna ccgnggncaa ccttggnaaa tggtggggag 1020
acaa 1024

<210> 65
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 65
gggnnnnnnt aactnnacgc ccgcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actctgctga tctctgcctt 120
gtaatggaaa tgtttcattc attaatgtta ttgatatggt tgcactatgt ccgtaatttt 180
gctttttgtg tatctgtcta atgtttttta ttctcctttt tctcttttac tattttcttt 240
taaattaagt aaatagttcc taacgtagta ttttattttc ttaaaataaa tcaaactcac 300
ttataaaata tatttcatat tactttctta tcgattgctg tatgccttac aacatacatc 360
ttatcagact caacatttat agtaacataa atccattgag acatagtaac attaattctt 420
tataggtcta tttattctac ttattcaata attgttatat atatattaca tctacatgtt 480
acaaacacaa aaatatattg ttataatgct tgtttttatg taattttatg tcttttaaag 540
aacatgagag aagaaaggaa agcaaagtaa ctattagcat tgttatgtta acattattct 600
ttacaatttc tggttctctt cattttttc ctgttgattc aagttgtatc ttagtgtcat 660
ttcatttctt taatacaact ttgctccaat tatttctttt gtgctcttaa tgtcaaatat 720
attaagtttt gnttgcatta taggctcaac actattatac atatattggt ttatgcattt 780
attttgaatt aagagaaaat aaaaatatgc aatttaatgg cttatatact attcatataa 840
ttaccctcta tgagggtnca ttatatatgn attccaaccn tatttataaa ntccaaanta 900
cctggtangt gccnaaaggc tcctaagcct attagcccgg aaaaaaaatc cctgggtant 960
tccttggnaa gggaggtttg attgccacca acctntttta natngggttg ggttttaata 1020
aacc 1024

<210> 66
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 66
ggagnnnnnn ttgngtnngg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg 60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtactccag cctgggtaac 120
agagggagac tctatgccaa acaaacaaac aaacaaacaa acaaacaatg gagaccagaa 180
agcaatgaga tgaaatgttc aaagtgctga aagaaaaaaa aaggtcaacc aaaagtctta 240
tatccagaat atttttcaaa gtataaaagc aaaatacatt ctcagataat aaaaacaaaa 300
caaactaaaa gagtttgttg ctatcatacc taccttacaa gaaatactca gtgatttttt 360
tcaggctaat aggctaggag catttggcac ctaacagtaa tttgaattta tatatatgtt 420
tgtatacata tatatggaac actcatagag gtaattatat gaatagttat ataagacatt 480
aaattgcata tttttatttt ctcttaattc aaaataaatg cataaaacaa tatatgtata 540
atagtgttga gcctataatg caaacaaaac taatatattt gacattaaga gcacaaaaga 600
aataattgga gcaaagttgt attaaagaaa tgaaatgaca ctaagataca acttgaatca 660
acaggaaaaa aatgaagaga accagaaatt gtaaagaata atgntaacat aacaatgcta 720
atagttactt tgctttcctt tcttctctca tgntctttaa aagacataaa attacataaa 780
aaccaagcat tataacaata taattttggg tttggaacat ggtagatgta tatatatata 840
ccattattgg ataagtagaa taaataggac tattaaggaa ataatggtac tatggctcaa 900
tgggantaag gtacctataa nggtgagcct gganaggaag natgttgnaa ggcttccggc 960
aatcggttta gaaagtantt tggaaatata ttttnatnaa gngggttgga ttaatttagg 1020

aaaa 1024

<210> 67
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 67
gagnnnnnnt taactccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gccctttcga gcggccgccc gggcaggtac tttttttttt tttttttttt 120
ttttggaaaa tgagattttt gactttaaca aaacaaatac agattgaatt taccaaatat 180
tgataattca tgtanaacgg gtgccacaga ttttaaagta tcaaaaccaa gagggcatca 240
caaaataaac tttggtgaaa aatatcttca tcaaagaaga aaatatgaga agagtagtcc 300
ttatgcagtg aggagaaata tatttggtaa agtaaatatg ggtagtagat actgaatcta 360
tagatagcat atattccaaa tgttttttag ggaatatcaa atcagatgat gcttanatgt 420
tatagtaata tcacttatct catttggaat gaaatttaat gtttttttaat aaatagcaaa 480
ttttcatttt ttcactacct ttataaaaca aattaaatat ttagagtata actgatcata 540
actaacatca ccttgcattt actaataaat actctaaata catttggttt attattggaa 600
tttatatcct tataatttta cctgctagaa attagtgacc ttgtggcatt atgtttaaag 660
tttacatttt cccagtgatg tgaacagtat ttatacntaa aatggatatc tgnccaatga 720
atagtaacca tgtttggtgg tttaaaaacc gnacatggtt tagtttgaca ttggcatgtc 780
tcttcagaaa ttnaaaaggt atcntttaag ggatggcttt tnggaaatca ttaataaact 840
accntctggg aaaangaatn ccaatttcaa gaagctacct aantagaact cagaccccn 900
gggcagggtn ttggnanaaa angctttcaa ttncaaattn nttntccgnn gnaaaccgaa 960
ngggaccctt annngnntgg accnccttc cngnaaactg gttttaaaat aaaaatttcc 1020
gnnc 1024

<210> 68
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 68
gnngnnnnnn ntnnnttcga attgggccct ctagatgcat gctcgagcgg ccgccagtgt 60
gatggatatc tgcagaattc gcccttagcg tggtcgcggc cgaggtacct agtagatcta 120
ctgagattaa acgggacctg tttggagcag aacctttga cccatttaac tgtggagcag 180
cagatttccc tccagatatt caatcaaaat tagatgagat acaggagggg ttcaaaatgg 240
gactaactct tgaaggcaca gtattttgtc tcgacccgtt agacagtagg tgctgacatc 300
aagaacaaga aatcctgatt catgttaaat gtgtttgtat acacatgtca tttattatta 360
ttactttaag ataggtatta ttcatgtgtc aatgttttta aatattttaa tattttgaaa 420
attttctcag ttaaatttcc tcaccttcac tattgatctg taatttttat tttaaaaaca 480
gcttactgta aagtagatca tacttttatg ttcctttctg tttctactgt agatgaattt 540
gtaattgaaa gacatattat acaaatacct gccttgtgtc tgagttctat ttagttagca 600
tcttgaaatt tgtattcatt ttccagatgg ctagtttatt aatgatttcc caaaagccat 660
accttaaaga taacttttta aattctgaag agacatgcca atggcaaact aaacatggtc 720
tggttttaaa ccaaccaaca tgttactatt cattgggaca gatatcattt tatggataaa 780
tctggtcaca tactggggaa atggaaactt taaacataat ggccccangg cactaatttc 840
ttaccggtaa aaatnttang ggtttaaant nccatattna acccnatggt tttaaaggat 900
ttattntaaa ngcnngggga ngtanntttg acagtntncn ctaaaanttt aaatggttn 960
ttaaaggtnt gaaaaaanga aaaattgctt ttttttnaaa acctttaant cntttccnag 1020
gggn 1024

<210> 69
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 69

```
gggnnnnnnn tnncttanac gccnngcttg gtaccgagct cggatcccta gtaacggccg      60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg caggtactcc ggtcggtgtc     120
agcagcacgt ggcattgaac attgcaatgt ggagcccaaa ccacagaaaa tggggtgaaa     180
ttggccaact ttctattaac ttatgttggc aattttgcca ccaacagtaa gctggccctt     240
ctaataaaag aaaattgaaa ggtttctcac taaacggaat taagtagtgg agtcaagaga     300
ctcccaggcc tcagcgtacc tcggccgcga ccacgctaag ggcgaattct gcagatatcc     360
atcacactgg cggccgctcg agcatgcatc tagagggccc aattcgccct atagtgagtc     420
gtattacaat tcactggccg tcgttttaca acgtcgtgac tgggaaaacc ctggcgttac     480
ccaacttaat cgccttgcag cacatccccc tttcgccagc tggcgtaata gcgaagaggc     540
ccgcaccgat cgcccttccc aacagttgcg cagcctgaat ggcgaatgga cgcgccctgt     600
agcggcgcat taagcgcggc gggtgtggtg gttacgcgca gcngtgaccg ctacacttgc     660
cagcgcccta cgcccgtcct ttcgctttct tcccttcctt tctcgccacg ttcgccggct     720
ttccccgtca agctctaaat cgggggctcc ctttagggt tccgaattan tgctttacgg      780
accttgaccc caaaaaactt gantanggtg atgggtcacg taatgggccc atnggccttg     840
anaagacggt ttttcgccct ttgacngttg gagtccacgt tctttaaaag gggactcttg     900
gttccaaact ggaacaaccn nttaanccttt atttngggct aatcctttgg aattaatnag    960
ggattttgcc caatttgggc ccttnggtta aaaaaagggg cttgntttaa ccaaaaattt    1020
aacc                                                                 1024
```

<210> 70
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 70

```
ggagnnnnnn ttnngtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg      60
atatctgcag aattcgccct tagcgtggtc gcggccgagg tacgctgagg cctgggagtc     120
tcttgactcc actacttaat tccgtttagt gagaaacctt tcaattttct tttattagaa     180
gggccagctt actgttggtg gcaaaattgc caacataagt taatagaaag ttggccaatt     240
tcaccccatt ttctgtggtt tgggctccac attgcaatgt tcaatgccac gtgctgctga     300
caccgaccgg agtacctgcc cgggcggccg ctcgaaaggg cgaattccag cacactggcg     360
gccgttacta gtggatccga gctcggtacc aagcttggcg taatcatggt catagctgtt     420
tcctgtgtga aattgttatc cgctcacaat tccacacaac atacgagccg gaagcataaa     480
gtgtaaagcc tggggtgcct aatgagtgag ctaactcaca ttaattgcgt tgcgctcact     540
gcccgctttc cagtcgggaa acctgtcgtg ccagctgcat taatgaatcg gccaacgcgc     600
ggggagaggc ggtttgcgta ttgggcgctc ttccgcttcc tcgctcactg actcgctgcg     660
ctcggtcgtt cggctgcggc gagcggtatc aagctcactc aaaggcggta atacngttat     720
ccacagaatc aaggggatac gcaggaaaga acatgtgaac caaaaggcca caaaaggcca     780
ggaacccgta aaaaaggccg cgttggctgg cgtttttcc atangcttcc ggccccccttg     840
acgagcatta ccaaaaatcg acgctcaagt tcaaaggtgg cgaaancccg accggactnt     900
taagaatccc agcgtttncc cctggaactt ccttgggcgc ttttctggtt ccaaccttgc     960
cgttaccgga tacctggncc gcnttttcc ctttngggaa accngggcnt tntcaaaant    1020
taac                                                                1024
```

<210> 71
<211> 1024

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 71

```
gagnnnnnnt taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttttttttc tttttttaca     120
tctgatttta atgcttcgtt aacttcaaaa ggaactggta gagttcagaa ggtgagctgt     180
tgtttttcta aacctcttcc caggaagggg acattgacac ttgaattttt gtcacctttt     240
tcctcattag aaggaaagta gaaagcctta ctgtaggatt tttaaaaaaa aatccatctc     300
accccatatt ggtcttaaat aagtatagac taattaacct aagctacctt taacaacgta     360
gaatttagat gggttcatat atgtgagaaa aacctgaata taggacaggg gtcctacttt     420
tttccccacc tctgtcgccc aggctagagt atagtggtgt gatcttggcc cactgcaacc     480
tctgcttcct aggttcaagt gattctcctg cctcagcctc ccaagtagct gggattgtaa     540
gagtatgcca ccacgcccag ctactttttg tatttttagt agagacaggg tttcatcatg     600
ttggccagga tggtctctta actcctgccc tcaagtgatc caccagagag gagatcctcg     660
gcctccccaa gtgctgggat tataggcatg agccaccgtg cccagcctac tttctaatta     720
attaaaaaaa aaaaaaaaac ttcccaaatg agctgataaa aaactgacgt gaggctgctt     780
tgccttcaat aatacctagt tttcagctgt tccaactcgt ttccaaattg gaaattanct     840
ggaacnccac tacagtaatc ttcanggaan gggaaaatta ggccttaaaa gaatccccag     900
aaagttcanc atnggnancc tgnccnggcc ggnccgttca aaangggcna aatttgcaga     960
aattccatna cacttggcgg gccgttcgan catggctttt aangggccca attgnccctt    1020
aaag                                                                 1024
```

<210> 72
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 72

```
gnagnnnnnn ttnnnttccg aattgggccc tctagatgca tgctcgagcg gccgccagtg      60
tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta ccatgctgac     120
ttcttggtat cttttaaggc ctaattttcc cttccttgag attactgtag tgtgttccag     180
ctaatttcta tttggaaacg agttggaaca gctgaaaact aggtattatt gaaggcaaag     240
cagcctcacg tcagtttttt atcagctcat ttgggaagtt tttttttttt ttttaattaa     300
ttagaaagta ggctgggcac ggtggctcat gcctataatc ccagcacttg gggaggccga     360
ggatctcctc tctggtggat cacttgaggg caggagttaa gagaccatcc tggccaacat     420
gatgaaaccc tgtctctact aaaaatacaa aaagtagctg ggcgtggtgg catactctta     480
caatcccagc tacttgggag gctgaggcag gagaatcact tgaacctagg aagcagaggt     540
tgcagtgggc caagatcaca ccactatact ctagcctggg cgacagaggt ggggaaaaaa     600
gtaggacccc tgtcctatat tcaggttttt ctcacatata tgaacccatc taaattctac     660
gttgttaaag gtagcttagg ttaattaagt ctatacttat ttaagaccaa tatggggtga     720
naatggattt ttttttaaaa atcctacagt aaggctttct actttccttc taatgaggaa     780
aaaggtgacc aaaantcaag tggcaatggc ccctttctgg ggaaaagttt anaaaaacca     840
ccggttanct tntggaactt ttacccagtt ccctttttgaa gttaccgaag cctttaaaan    900
cagatgttaa aaaaggaaan nnnaaaaagt ncctttggcc gggaacccnc ttaagggcca     960
aattccacac acttgggggg ccgntnccnt anggatccca ncttgggncc aaannttggg    1020
gnaa                                                                 1024
```

<210> 73
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 73
gagnnnnnnt tnacttacac gccngcttgg taccgagctc ggatccctag taacggccgc 60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactgtgtt atggcacaga 120
caatgcttgc ttagcggtgc cttgttacat aggtggatgc agagtgcgca cacgggatga 180
tggcaataaa gacctcactc agtcgttgga atgaaggaac taggtaactg cttcaacaag 240
gacggtctca gctctacctt atctctcaac agagtgcaaa cactgagtgt gagctcagat 300
gtcatcttgt tcctctttaa aattcaccaa attcttttgc acatttttct gttatagaga 360
cacggatatc ttcttcttca tagtcatcaa agttgctggt atctccagag cctctaaact 420
ttggtatgaa tggagcttca accttcctct ggtaaatagc aatccaatct gtcgtggcaa 480
accacttgtg agtttttata tcactgacac cattctttag atttccaaat ctcttgatca 540
aatccacctg cagcaggttc cgtagaaggt ccttgagatc tgaactgaag tgggatggga 600
atcggacctt tccagaaaca atcttttcat aaatctgaat tggttggtct gcaaagaatg 660
ggggatagcc agctgccatt tcatagatta gcactcctaa tgcccaccaa tccactgcct 720
tattgnagcc cttgctgaga attatttctg gagccaaata cctctggagt tccacataat 780
ggccaagttc tgcctttaac tcttttggca aaccccaaaa gtctgtgacc cgggatatag 840
ccctgatggn ccaatttaag aagaattttc angggtttaa aaactctggt aaatgaaggc 900
taanggaaat ggaggnacct tttttttttt nnnnnnnttt ttttttnaa acnttgtaaa 960
aggccaaaat tttggctana anttantttc aaagnttnaa accntttcca aatttttttt 1020
taat 1024

<210> 74
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 74
ggagnnnnnn nttgagttcc ggccctctag atgcatgctc gagcggccgc cagtgtgatg 60
gatatctgca gaattcgccc tttcgagcgg ccgcccgggc aggtacagtc aactgcattt 120
ttctctggtg accaagcttc cactgacaag gaagaggatt atattcgtta tgcccatggt 180
ctgatatctg actacatccc taaagaatta agtgatgact tatctaaata cttaaagcct 240
ccagaacctt cagcctcatt gccaaatcct ccatcaaaga aaataaagtt atcagatgag 300
cctgtagaag caaaagaaga ttacactaag tttaatacta aagatttgaa gactgaaaag 360
aaaaatagca aaatgactgc agctcagaag gctttggcta aagttgacaa gagtgggatg 420
aaaagtattg atactttttt tggggtaaaa aataaaaaaa aaattggaaa ggtttgaaac 480
tttgaaaata aaatctagca aaaatatttg ctttttacat gttttaaaaa aaaaaaaaaa 540
aaaaaaaaaa aagtacctcc attcactaga cctcatctac agagatctaa aacctgaaaa 600
tctcttaatt gaccatcaag gctatatcca ggtcacagac tttgggtttg ccaaaagagt 660
taaaggcaga acttggacat tatgtggaac tccagagtat ttggctccag aaataattct 720
cagcaagggc tacaataagg cagtgggatt ggtgggcatt aggagtgcta atctatgaaa 780
tggcactggc tatccccatt cnttgcagac ccacccattc agaatttatt gaaaaagatg 840
gttcttggaa ngnccgaatt cccattcccc ttcagntcna actcaagggc ccttttacgg 900
aancctggtt gcanggggga ttgatccagg anaatttgga aatcttaaag aaaaggggnc 960
cggggtttta aaaacctcnc aagngggttt gcccccancg naatgggatt ggtttttccc 1020
ccna 1024

<210> 75
<211> 1024
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 75
gagnnnnnnt taactcccgc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtacta tatgtatttt attaaaaatg 120
tggaagatta atctgtttct ctctgaatgt agattttcac caaaacatct cttaaaacag 180
cagggactca acacttaaaa atgaactaga agagctgggc acagtggctc acgcctgtaa 240
tcccagcact ttgggaggcc gaggcgggca aatcacttga ggtcaggagt tcgagaccag 300
cctggccaac atggtgaaac cctgtctcta ctaaaaacac aaaaattaac tgggcatggc 360
ggcacacgcc tttaatccca gctactcaag aggctgaggc aggagaatcg ctttgaacct 420
gggaggcaga ggttgcagtg tgctgagatc ataccactgc attccagcct gggcgacaga 480
gcaagactcc acctcaaaaa aaaaaagaag aaaagaaaat agtagtctca gccaggcgtg 540
atggctcaca cctgtaatcc cagcactttg ggaggccaag gtgggcagat cacctgaggt 600
caggagttcg agaccagcct ggcctacgtg gcaaaacctc atctctaata aaaatacaaa 660
aattagcttg ggcgtggtgg catgcacctg tcatcccagc tatttgggag gctgagacag 720
gagaagtcgc tttgaacctg ggangcagaa aattgcggtg aagctaagat cgcacgactt 780
cacttccacc tgggcaaaag anggaactct atctcaaaaa aaaaaaangg aaaaagtagt 840
ctntaagaca ctgggcaaac cttgaaagga attgagcagt cctcactttn ctgnagtcan 900
tttgntnaat gccacatggc tcttttgnaa gaaatttgag agctttttc taatcccaat 960
ttttntaatt tgggaattcc tttttccgga ttttttcntt gccnggnggt gttcccaang 1020
gcct 1024

<210> 76
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 76
gnngnnnnnn ttnnnttgng antngggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta ctctttgtgg 120
ctggcttctt tttctgcaca caatgcctat gagaccataa ctaaagtcaa attccatggt 180
cactaaccaa taatggcatc tcaaagaaat tccaacctag agaaattctg atgatgtggt 240
tagaacacca atcaggacac tcacttcatg gttgataatt cccgacatgc actgattcag 300
acccagctta ttgaattcat tgagtccaca ggccagcact ttgcctgact gggtcaacag 360
aaatgtccca tcacagccac attgaactgc aacaataatc aaggccttgg gaacatccac 420
ctgcaagaaa aaaatcagaa aaagaaatcc caaatatata attcgtatta gaaaaaaagc 480
tctcaaattc tttcaaaaga gacatgctgc atttagcaga atgactacag gaaagtgagg 540
actgctctat tcttttcagg tttgcccagt gtcttagaga ctactttttc tttttttttt 600
tttgagatag agtttccctc ttttgcccag gctggagtga agtccgtgcg atcttagctc 660
accgcaatct ctgcctccca ggttcaagcg acttctcctg tctcagcctc ccaaatagct 720
gggatgacag gtgcatgcca ccacgcccag ctaatttttg gatttttatt agagnatgag 780
gttttgccac gtaggccaag ctggncttga acttctgacc ctcaagtgac tggccaccct 840
tgggccttcc aaagtgctgg gaattacagg gngagccatt acgcctggnn tgaaactcca 900
atttcttttc ttcntttttt ttttggnggg gagcttgctn tgcncccaag ctgggaaagc 960
cangggatga cttnnnncac tggaaccttg gcttcaggtt taaagggatt tctggcttaa 1020
nccc 1024

<210> 77
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)

<223> n = A,T,C or G

<400> 77

```
gagnnnnnnt aacttacacg cccgcttggt accgagctcg gatccactag taacggccgc     60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactttttt tttttttttt    120
tttttttac agaaggctgt aaagctttat tgggagaatt ttaatgaaca aatttccaac     180
ataggagcag cctgcatcat ttcaacgtgc cttcttttaa cactgtgatt gcttttcacc    240
ttcttcaggc gttttcacct cctctggatt tggcgggtcc atctcctgcc catcaggacc    300
atcttcacac tcacacccag tctgtgggtg accctgttcc tggctatgag cttcaggctt    360
cggcccttga cctgcanatg ctccctcatc ctctccctcc tgagcagctg caggatcctg    420
acgttgagtt gctggttccc cttcttcagg tgttgctggt tccgcttcat cactgaactg    480
ctcgggccgc ataggcccaa tcatttcagg aggctgnacc tgcccgggcg gccgntcgaa    540
agggcgaatt ctgcagatat ccatcacact ggcggccgnt cgagcatgca tctagagggc    600
ccaattcgcc ctatagtgag tcgtattaca attcactggc cgtcgtttta caacgtcgtg    660
actgggaaaa ccctggcgtt acccaactta atcgccttgc agcacatccc cctttcgcca    720
gctggcgtaa taacgaaaag ccccgcaccg atcgcccttt ccaacagttg cgcancctga    780
aagggcnaaa tggacncccc tggaacggcc attaaccccc gcnggnnnnn gggtaccccn    840
caangngacc ggtacacttg gcaangccct aacgcccggt ccntttgntt ttctttcctt    900
tcnttttngc acgttnnncc gggttttccc ggnaagctnt naaatngggg ggtccccntt    960
tngggtccna ataaggcntt tagggncctt ggnccccnaa aaatttgntt ttnnggggan   1020
ggtc                                                                1024
```

<210> 78
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 78

```
gnagnnnnnn ttgagtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg     60
atatctgcag aattcgccct ttcgagcggc cgcccgggca ggtacagcct cctgaaatga    120
ttgggcctat gcggcccgag cagttcagtg atgaagcgga accagcaaca cctgaagaag    180
gggaaccagc aactcaacgt caggatcctg cagctgctca ggagggagag gatgagggag    240
catctgcagg tcaagggccg aagcctgaag ctcatagcca ggaacagggt cacccacaga    300
ctgggtgtga gtgtgaagat ggtcctgatg ggcaggagat ggacccgcca aatccagagg    360
aggtgaaaac gcctgaagaa ggtgaaaagc aatcacagtg ttaaaagaag gcacgttgaa    420
atgatgcagg ctgctcctat gttggaaatt tgttcattaa aattctccca ataaagcttt    480
acagccttct gtaaaaaaaa aaaaaaaaaa aaaaaagtac ctcggccgcg accacgctaa    540
gggcgaattc cagcacactg gcggccgtta ctagtggatc cgagctcggt accaagcttg    600
gcgtaatcat ggtcatagct gtttcctgtg tgaaattgtt atccgctcac aattccacac    660
aacatacgag cccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact    720
cacattaatt gcgttgcgc tcactgcccg ctttncagtc gggaaacctg tcgtgccagc     780
tgcattaatg aatcggncaa cgccccgggg aaaaagcggt ttgcgtattg ggcgctcttc    840
gctttcttgg ttacttgact cnttgngcct tggccgttcg gttgcggnna acggtttcag    900
cttacttcaa angcgggaaa tccggttttc cncggaaatc aggggaatac cccnggaaaa    960
gaacttgtga accnaaaggc ccnccaaaag gcccngnaac cgtaaaaaan ggccccntnn   1020
nntn                                                                1024
```

<210> 79
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 79
gngnnnnnnt taacnccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gccctttcga gcggccgccc gggcaggtac tgtttttgtc atttgcacca 120
gcttctttct ccaggaaaga tcaaaacgat gcactgcaag gttaacatcc aatttttaat 180
acattgtgat tggtccagat agctgcctta tccaactgcc tcctttggac cacttcatca 240
tgggacagct tgatgcaatc tacttgacaa gaccctggaa ccccacaccc ctcatggaac 300
cagtgtccac ctcccagtca cagtgtgacc ccagggaact cttgcctgct tgctttaaac 360
ccaccactta aaagtctcca cagaaaacct gtttgaatag tacctcggcc gcgaccacgc 420
taagggcgaa ttctgcagat atccatcaca ctggcggccg ctcgagcatg catctagagg 480
gcccaattcg ccctatagtg agtcgtatta caattcactg gccgtcgttt tacaacgtcg 540
tgactgggaa aaccctggcg ttacccaact taatcgcctt gcagcacatc ccccttttcgc 600
cagctggcgt aataagcgaa gaggcccgca ccgatcgccc ttcccaacag ttgcgcagcc 660
tgaatgggcg aaatggacgc gccctgtagc ggcgcattaa gcgcgggcgg gtggtggtgg 720
ttacgccgca gcgtgaccgc tacacttgcc agcgccctta cgcccgctcc tttcgctttc 780
ttcccttcct ttttngcacg ttcggccggc ttttcccgtc agctctaaat cgggggctcc 840
cctttagggt tccgaattan tgctttacgg gaccttganc cccaaaaact tggnttaggg 900
gtgagggtca cgtatgggcc attggccctg aaaanacggt ttttcgcccc tttgaccctt 960
ggaatcncgt nnttttaaaa ggggactttg gtcccaactg ggacaacnnt taacccctta 1020
ttng 1024

<210> 80
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 80
gnagnnnnnn ttnnnttgng aattgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtact attcaaacag 120
gttttctgtg gagactttta agtggtgggt ttaaagcaag caggcaagag ttccctgggg 180
tcacactgtg actgggaggt ggacactggt tccatgaggg gtgtggggtt ccagggtctt 240
gtcaagtaga ttgcatcaag ctgtcccatg atgaagtggt ccaaaggagg cagttggata 300
aggcagctat ctggaccaat cacaatgtat taaaaattgg atgttaacct tgcagtgcat 360
cgttttgatc tttcctggag aaagaagctg gtgcaaatga caaaaacagt acctgcccgg 420
gcggccgctc gaaagggcga attccagcac actggcggcc gttactagtg gatccgagct 480
cggtaccaag cttggcgtaa tcatggtcat agctgtttcc tgtgtgaaat tgttatccgc 540
tcacaattcc acacaacata cgagccggaa gcataaagtg taaagcctgg ggtgcctaat 600
gagtgagcta actcacatta attgcgttgc gctcactgcc cgctttccag tcgggaaacc 660
tgtcgtgcca gctgcattaa tgaatcggcc aacgcgcggg gaaaagcggn ttgcgtattg 720
ggccgctctt ncgcttnctn gcttacttga ctcgcttgcg cttcgnccgt tcggcttgcg 780
gcnaagcggt attcagctta cttcaaaggc ggtaaatacn ggtattcccc agaaatcagg 840
gggatnaccc cnggaaaaga acatgtgaan ccaaaaggcc accaaaaagg ncnnggaacc 900
gtnaaaaang gccncnttnn nnctgngttt ttccattaag gttcccgccc ccttgacagc 960
ctttccaaaa attcganncc ttcaaantnc aaagggggcn aaaaccccnc cggggctttt 1020
taag 1024

<210> 81
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 81
gngnnnnnnt taacttacac gccagcttgg taccgagctc ggatccctag taacggccgc 60

```
cagtgtgctg gaattcgccc tttcgagcgg ccgcccgggc aggtacctca ttagtaattg    120
ttttgttgtt tcattttttt ctaatgtctc ccctctacca gctcacctga gataacagaa    180
tgaaaatgga aggacagcca gatttctcct ttgctctctg ctcattctct ctgaagtcta    240
ggttacccat tttggggacc cattataggc aataaacaca gttcccaaag catttggaca    300
gtttcttgtt gtgttttaga atggttttcc tttttcttag ccttttcctg caaaaggctc    360
actcagtccc ttgcttgctc agtggactgg gctccccagg gcctaggctg ccttcttttc    420
catgtcccac ccatgagccc tccactggac agctcagtaa gcctggccct tcattctgcg    480
ctgtgttctt cctctgtgaa aatccaatac ctcttacctc ctctgcatgc aaagattctc    540
aaggattgtc agacttcaaa cgtaacagca gaaccaccag aaggtcctat aaatgcagta    600
gtgaccttct caagctgtca ggtctttaaa taggatttgg gatttaatgc tatgtatttt    660
taaaggaaag aaataagaag ttgctagttt taaaaatgca tgtcttttaa ccaattcaga    720
atctgccccc aaactttttt naaaagtcaa gacagataaa gctttggggg agacngaaaa    780
aaaaaannnn nnnaaagagt accttnggcc gggaacacgc taangggcaa attctggcan    840
aaatncatta cactgggcgg gcggtttgag cattgcntnt anangggccc aattngncct    900
ataanggggg cgattacaat tncctggcc gcgttttaaa acgtnngaac tgggaaaanc     960
ctggggtncc cacnttaatg gccttggnga naatccccct tttncccnan tggngnannn   1020
nncn                                                                1024
```

```
<210> 82
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 82
```

```
gnagnnnnnn ttnngtttgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg     60
atatctgcag aattcgccct tagcgtggtc gcggccgagg tactcttttt tttttttttt    120
ttttccgtct ccccaaagct ttatctgtct tgacttttta aaaaagtttg ggggcagatt    180
ctgaattggc taaaagacat gcatttttaa aactagcaac tcttatttct ttcctttaaa    240
aatacatagc attaaatccc aaatcctatt taaagacctg acagcttgag aaggtcacta    300
ctgcatttat aggaccttct ggtggttctg ctgttacgtt tgaagtctga caatccttga    360
gaatctttgc atgcagagga ggtaagaggt attggatttt cacagaggaa gaacacagcg    420
cagaatgaag ggccaggctt actgagctgt ccagtggagg gctcatgggt gggacatgga    480
aaagaaggca gcctaggccc tggggagccc agtccactga gcaagcaagg gactgagtga    540
gccttttgca ggaaaaggct aagaaaaagg aaaaccattc taaaacacaa caagaaactg    600
tccaaatgct ttgggaactg tgtttattgc ctataatggg tccccaaaat gggtaaccta    660
gacttcagag agaatgagca gagagcaaag gagaaatctg gctgtccttc cattttcatt    720
ctggtatctc aggtgaactg gtaaaaggga gacatttgaa aaaaatgaaa cnaccaaaac    780
cattactaat gaggtacctg cccnggcngg ccgttcnaaa gggccaattc cacacactgg    840
gcggccgtta cttaatggat ccnaactcgg taccaancnt tgcgtaaatc atgggccnnt    900
actgggttnc ctgggggnaa atggtatncg gttaccaatt ccccccaann ttcgancccg    960
gaanccctta agggtaaanc cctgggggcc ctnaagaggg gctaacttcc catttaaatg   1020
ggtt                                                                1024
```

```
<210> 83
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 83
```

```
gggnnnnnnt taanttanac gccnnncttg gtaccgagct cggatcccta gtaacggccg     60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg caggtacact taaaattggt    120
gccgagcagg gatataacct gcagttaagt gaaaagaaaa tccagcctcc ccctccaaaa    180
```

```
aaaaaaaaaa atttaatttt taaaaattag tggtatggca ataagacact tcagaggcta     240
tcttaacctc tgaataccca tcttctagtt taaagacaga gacatcccat ctggaaaatg     300
ttaacttgtg ttgtcatctc gttgccggag taagtagaca taagacagag tttaagaagt     360
aaaaatatag aaaaattttg atggtcacaa tgagataaat attagaatat tactattcca     420
atgattaaat gaggatcttg aaataaattc tgaagtcttc caatttttac atttattgga     480
ggggtccctg agttctgtca actttttat ttaagtctct tgctcttatt ttgtgcataa     540
atgttaaacc ttccaaaaat gaaatgttag ctttctttct tttactttt attaaattta     600
atagaaaata tgacctgagt agttaaaaag tattttgcat tatttgcagt aagatgtctc     660
tagcactgct caaagggcaa atttaaaac ttcagtctgg gtgaaagatt ttgctagttt     720
tacagaaaga tttgctatct taaactcaaa gctggtttt cttttctcaa tgtaagtgac     780
tgggatgctg gcttaagaat tctttccaag gncatgtttt tgaaataaac cttacatgag     840
agctttcctg ncatctacnc ctatatgtgg cctngaggtt gaccaaattt antttagntt     900
ctaagtgtaa nctatcccaa atgggctatc caaatttgaa tggngccctt catactgnga     960
aggaaaaang tggncctngg ccgggaacac ccttangggc caatttgcg anttccntac     1020
aatt                                                                  1024
```

<210> 84
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 84

```
gnagnnnnnn ttgagntngg ccctctagat gcatgctcga gcggccgcca gtgtgatgga      60
tatctgcaga attcgccctt agcgtggtcg cggccgaggt acagcattat catctcagta     120
tgtagtggca cacattcaaa atcgtataga ccatatgagg atagattaca acttagaaac     180
taaaataaat ttgttcaaca ctccagacaa catatagtgt agatgacagg aaagctctca     240
tgtaatgttt atttcacaaa catgaccttg gaagaattca taagacagca tcccagtcac     300
ttacatgaga aaagaaaaac cagcttgagt ttaagatagc aaatctttct gtaaaactag     360
caaatctttc acccagactg aagttttaaa atttgccctt tgagcagtgc tagagacatc     420
ttactgcaaa taatgcaaaa tactttttaa ctactcaggt catattttct attaaattta     480
ataaaaagta aaagaaagaa agctaacatt tcattttgg aaggtttaac atttatgcac     540
aaaataagag caagagactt aaataaaaaa gttgacagaa ctcagggacc cctccaataa     600
atgtaaaaat tggaagactt cagaatttat ttcaagatcc tcatttaatc attggaatag     660
taatattcta atatttatct cattgtgacc atcaaaattt ttctatattt ttacttctta     720
aactctgnct tatgnctact tactccggca acgagatgac caccacaagt taacattttc     780
cagaanggat gtctctgnct ttaaactaga aagatgggta tttcagaggg taagaatacc     840
ctctgaagtg gtcttaatgg catacccta attttaaaa antaaaattt tttttttttt     900
tgggangggg aaggctggat ttcctttcnc ttaacctnga gggtatatcc cctgnttggg     960
acccaatttt aagngnacct ggcccgggcn ggccgttcaa aagggcgaat ttccgcncct    1020
gggc                                                                 1024
```

<210> 85
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 85

```
gngnnnnnnt taacnccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gccctttcga gcggccgccc gggcaggtac gcgggagag agaagcgagg     120
ttctcgttct gagggacagg cttgagatcg gctgaagaga gcgggcccag gctctgtgag     180
gaggcaagac acagtgggtc gcaggatctg acaagagtcc aggttctcag gggacaggga     240
gagcaagagg tcaagagctg tgggacacca cagagcagca ctgaaggaga agacctgcct     300
```

gtgggtcccc atcgcccaag tcctgcccac actcccacct gctaccctga tcagagtcat 360
catgcctcga gctccaaagc gtcagcgctg catgcctgaa gaagatcttc aatcccaaag 420
tgagacacag ggcctcgagg gtgcacaggc tcccctggct gtggaggagg atgcttcatc 480
atccacttcc accagctcct cttttccatc ctcttttccc tcctcctctt ttcctcctcc 540
tcctcctgct atcctctaat accaagcacc ccagaggagg tttctgctga tgatgagaca 600
ccaaatcctc cccagagtgc tcagatagcc tgctcctccc ctcggtcgtt gcttcccttc 660
cattagatca atctgatgag ggctccagca gccaaaagga agagaagtcc cagcacccta 720
caggtcctgc cagacagtga gtctttaccc agaagtgaga tgatgaaaag gngactggat 780
tnggtgcagt ttctgntntt taagtntcaa atgaanggaa ccgatcncaa anggccgaaa 840
tncttggaaa agtgncntna aaaaattatg aagaacnntt tcccttggng gttaangaaa 900
cccctccaan gcnngcnngn nggnctttgg gcnttgangn nnaanggnaa gggatccccn 960
ttgggccnnt tcntttggcc ttggnnncct ncctngggcc ctancttnng aaggggaanc 1020
cnnn 1024

<210> 86
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 86
gnagnnnnnn ttnngtttcn gaattgggcc ctctagatgc atgctcgagc ggccgccagt 60
gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac tccaggtagt 120
tttcctgcac ccaatcttgg gtgagcagct tcctgggctc cccataaatg aggtgctcca 180
tcccatcata cagccccatc atattcagtg cttcccagat gacctcctca ggggtgcagt 240
agccctctat gaagattatg cttaggataa gtatgagaat gccagtcttg ggcatgctct 300
ggacatcact cagcatccca tcataggtga ggcccaggga ggtgacaagg acaaaggagt 360
ggccagtggg atccacttcc tttacatcaa tgccaaagac cagcagcatg cactcggagg 420
cttcactaaa caacaaaggg aagtggtctt cataattttt tatgacactc tccagtattt 480
ctgcctttgt gatcggctcc ttcatttgat acttgaagag cagaaactgc accaaatcag 540
tcaccttttc atctatctca cttctgggta aagactcact gtctggcagg acctgtaggg 600
tgcttggact ctcctccttt tggctgctgg agccctcatc agattgatct aatggaaggg 660
aagcaacgac cgagggggag gagcaggcta tctgagcact ctgggggagg aattggtgtc 720
tcatcatcag cagaaacctt ctctggggtg cttggtatta gangatacag gaggaggagg 780
angaagaaga ngaagaagga aaagaggatg gaaaagaagg actgggtgga aatggatgat 840
gaagcatnct tcttcacagc ccaggggaac ctgtgcaccc ttnaagggcc tggggcttac 900
ttttgggaat tgaagaactt ntttaggcnt gccanngntt taccctttg gancccttnag 960
ggcctnaagn acctttganc angggnnncn nnnnnnngga attgggcncg gaaatttggg 1020
ccna 1024

<210> 87
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 87
gggnnnnnnt taactcatac gccagcttgg taccgagctc ggatccctag taacggccgc 60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtacattgag accagcaata 120
gttccagcat ctttggtagc ctgacgctga gagtcattaa agtaagctgg cactgtgacc 180
acagcattgg taacagtctt cccaaggtag gcttctgcaa tttccttcat ctttgtcaga 240
accatagaag acacctcctc tggatagaag cttttggtct ctcccttgta ttctacttgg 300
accttgggcc tgccagcatc attcaccacc ataaagggcc aatgtttcat atcagactgg 360
acaacagcat catcaaatct gcgtccaatc agacgtttgg catcaaaaac tgtgtcggtg 420

```
gggttcattg caacttgatt ctttgcggca tcaccgatca accgttcagt gtccgtaaag      480
gcgacatagc ttggagtggt tcggtttccc tgatcattgg caattatctc gacttttccg      540
tgctggaaaa cacccacaca agagtaggtg gtgccaagat caataccaac tgcaggtccc      600
ttggacatgg ttgctgggat gtaggcctgg ctccaataac gaaggaagcc acaaaaaccc      660
aagagctgca ggcgaagtcc aatgagaccc cccgcggacc tgcccgggcg gccgctcgaa      720
agggcgaatt ctgcagatat ccatcacact ggcggccgnt cgagcatgca tctaganggc      780
ccaattcgcc ctataagnga gtcgnattac aatcacttgg ccgcgtttta caacgtcgtg      840
acttgggaaa accctggggt acccaactta atcgncttgn agcacaatcc ccntttnncc      900
anctggcgga antnaccnaa aaggcccgna ccgaacggcc ntttccaaaa gttgcncaan      960
cctgaaangg caaaaggacc cccccctta acggggccat taaaccccn ncngggnnnn       1020
nngg                                                                  1024
```

<210> 88
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 88

```
gnnnnnnttn ngattgggcc ctctagatgc atgctcgagc ggccgccagt gtgatggata       60
tctgcagaat tcgcccttcg agcggccgcc cgggcaggtc cgcggggggt ctcattggac      120
tcgcctgcag ctcttgggtt tttgtggctt ccttcgttat tggagccagg cctacatccc      180
agcaaccatg tccaagggac ctgcagttgg tattgatctt ggcaccacct actcttgtgt      240
gggtgtttc cagcacggaa aagtcgagat aattgccaat gatcagggaa accgaaccac       300
tccaagctat gtcgccttta cggacactga acggttgatc ggtgatgccg caaagaatca      360
agttgcaatg aaccccaccg acacagtttt tgatgccaaa cgtctgattg gacgcagatt      420
tgatgatgct gttgtccagt ctgatatgaa acattggccc tttatggtgg tgaatgatgc      480
tggcaggccc aaggtccaag tagaatacaa gggagagacc aaaagcttct atccagagga      540
ggtgtcttct atggttctga caaagatgaa ggaaattgca gaagcctacc ttgggaagac      600
tgttaccaat gctgtggtca cagtgccagc ttactttaat gactcttcag cgtcaggcta      660
ccaaagatgc tggaactatt gctggtctca atgtacctcg gcccgngacc acgctaaggg      720
cgaattncag cacactggcc ggccgntact taatggatcc gaactcggta ccaagccttg      780
cgtaatcatg gnccatactg gttnctgngg tgnaattggt attccggtca caattncnca      840
caacattcca anccggaagc cttnagtgta aagccctggg tgcccttaag agtgagctta      900
ctnncantta aatgcgttgc gcttnnttgg ccgttttcca tcgggnaaan ctgcngccaa      960
ctggatttaa ggaattggnc aannccccgg ggaaaaaagn gtttggtatg gcgcttttnc     1020
gttt                                                                  1024
```

<210> 89
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 89

```
gggnnnnnnt taaactccag cttggtaccg agctcggatc cctagtaacg gccgccagtg       60
tgctggaatt cgcccttgag cggccgcccg ggcaggtaca gttcagtaat gttaagtgta      120
ttcacagtgc tgtgcaaaac atttctatct tgcaaaaccg aagttctata tccactaaac      180
aactccgcat tttccctctc cccagcccct gccaactgcc attctacttt ctgtttctct      240
atatttgact acactagaca cctcatacaa gttaaatcag agagtatttg ttttttgtg       300
actggtttct ttaaacttag cataacatcc tcaagatcca tcaatagtct atcatgtatc      360
atgtattact tctttttaa ggttgaacaa tattccactg tgtgtgtgtg tgtgcacgtg      420
tataccacgt tttgtttagc cattcgtcca tcaatggaac ttgggttgct tcgacccttt      480
ggctactgta ttacgttgtt ctagcattgc tataaagacc tgaggttggg taatttataa      540
```

agaaaagaag ttctgcaggc tatacaagca tggtgctggc atctgcctgg cttctgggga 600
ggcctcaggg accttttact catggtggaa ggtgaggcag gagcaggcat gccacatggt 660
gaaagcagga gcaagaaaga gtggggaggg tgccatcact taaaaaacca gatcccatga 720
gtattcatta ttgcaagaac agcatcaaac catgaggctt cancccgtgg cccaaacacc 780
ttccaacang ccccaactcg cattaaggat acctttcnaa nntaagggtt gggggggacc 840
aaatntccca actatatcan tgnttttgaa cagggnctcc agttctttta aatcccgaaa 900
aaatttttaa aggantccca acccttttaa ngaactaaag gtttcccgna nnnngaaaag 960
tttttnnccc ngggggnaaa attnaatgnn tttncccnaa aaantaantt ttnaaagaaa 1020
nttt 1024

<210> 90
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 90
gnagnnnnnn ttnngttncg aattgggccc tctagatgca tgctcgagcg gccgccagtg 60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgcggtaca tctcctaaag 120
actaatggtc atttacaaat tcaaacatga gataaagtat ttggtgatat gtccatcaag 180
tataactcag aaatcagtaa acaagtcttt tcccaaagta agttccttct aaatgtagct 240
aaaaagagcc actttgtcat taaagtgaat gagtatgcat ttttagaaca gacttgatgt 300
ttggattgtg ttaaacatat gtctgttagt gaaagtgtta gtcacaaaga taaaatttca 360
tctaaaaata atatatagag aaaaatgcaa taaatataca catggtaaaa tacttctctt 420
ttctgtaaac ttttagttct ttataagggt tgtgatatca tttaaaaatt tttctgtatt 480
gaaagaaact ggagacactg ttcatagcag ctgatatagt ttggatattt gtccccaccc 540
aaaccttata ttgaaatgta atccttaatg cggaggtggg gcctggtggg aggtgtttgg 600
gccacggggg tggagcctca tggtttgatg ctgttcttgc aataatgaat actcatggga 660
tctggttttt aaagtggatg gcaccctttc ccactctctc ttgctcctgc tttcaccatg 720
tggcatgcct gctcctgcct caccttcacc atgagtnaaa ggncctgang cctcccagaa 780
gccangcaga tgccancanc attgcttgga tagcctgcan aacttctttt ctttataaaa 840
taccccaacc tnaggcntta tgccatgctt gaacaaccgt aatncntanc ccaanggtcn 900
aaccaaccca ggtccattgg nngggcnaag gnttaacnaa acgnggnntc ccntgcncna 960
nnnncccccn ggggnaaatg gcaacccttn aaaanaagnn tncctgganc cngnnnnncc 1020
nttt 1024

<210> 91
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 91
gggnnnnnnt aattancgcc ngcttggtac cgagctcgga tccctagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta ccttggaagt tatgtcatta 120
atataggctg gttcatcaaa taaagcaaaa ccttgcaata tcagctagat ttacactccg 180
ggacgttgcc caaaggtagg aagaaagcag agggaaatat ttcagtcatc atttccaaag 240
tcattatcaa aatctgtgag gaagtttaat cttccaaaga gtcaatgtca gacatcaggc 300
ctctgttgcc tgcttctctc gaggcactag attaggagtc ttcaataaga gacttaacat 360
gaggtatatg gaagatgagg caccgagata agttcatcat taggtgtgag cactgctcac 420
ccttgctggc aagttctcct taagggcctg aagcacaggt gtccaaagaa aagcgttaag 480
tccatcttaa tagaatctat gtggtatatg atgtggtcag cccctggtct gtgatcagca 540
agaacctaca gcacagatta tgccctgccc acttcaatga atacctactc tcctccattc 600
tccatcactt tttttgctat caagaactcc ggaccttgcc catgggagaa gtttagagag 660

```
gaactcttgt ggagaactgg tttattttct gccctgtgcc gacgagtttc agctggccaa     720
gaaaggagtc aagttattaa aaagcatcac aatggagatc ttccaggctg ggttttttgg     780
tttttggtgg taaaactggg ggaaangggg actatttatt ctggccttaa atcaatnggc     840
aaattaagtc aagaagaccn ttttgggaat gtngactatg gatnccctcc taatngaatg     900
gagnagcctt aaaaaggggg caangtaang gttttcnggt atggaagcca aaanttttnc     960
cggctnaatg ggntggntnn ccaatattnn taccggcccn aaangggnnt tttncnnngg    1020
gtcc                                                                 1024
```

<210> 92
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 92

```
nngnnnnnnt tnngantggg ccctctagat gcatgctcga gcggccgccc gggcaggtac      60
tgcatccata atttatcgcc atgtgcaaca gctttgcgtt ttctaaggca caatttttaa     120
tgaaatgatg tgtagatttc aatctaataa cagctcatcc aaatgacaaa tatggtcgaa     180
atccctccag tggctgagga aatttctgca cctatatgga acccacatgc aaagaaccca     240
tctagcatgt aataaataat cgctagccat actcaataag acacggaaaa attattgctt     300
acataacaga aaaacatcta cttgaccccc ttttatgact acatcaatct attaggagtg     360
tatccatagt ctacattcac aaaatgtcat cttgacttat ttgccattga tttaaggcag     420
aataaatagt ccccctttcc ccagtcttaa caacaaaaaa caaaaaacca gcctggagat     480
ctacattgtg atgcttttta ataacttgac tcctttcttg gccagctgaa actcgtcgca     540
cagggcagaa aataaaccag ctctccacaa gagttcctct ctaaacttct ccatgggcaa     600
ggtccggagt tcttgatagc aaaaaaagtg atgggagaat ggaggagaag taggtattca     660
ttgaagtggg cagggcataa tctgtgctgn aggttcttgc tgatcacaga ccaagggctg     720
accacatcat ataccacata gattctatta agaatggact taacgctttt ctttggacac     780
ctgtgcttta ngccctttaa ggagaacttg ncanccangg gtgagcagtg cttcacacct     840
taaggatgaa ccttaatctc ggggcctcat cttccatata nccctaaggg taagnctctt     900
taatggaaga ctcctnaatt agnggccttg aaaagaagca ggcacccgaa gggcctgagg     960
ctgacattgg ctcttttnga agaataaact ttccttaccg naatttggaa aaggaccttt    1020
ggaa                                                                 1024
```

<210> 93
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 93

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gngnnnnnnt taactccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttcaaatgt cactgaaaga     120
attgtttttg taacagtatg caaaatgata ctgtattgtt agaacaaaaa tctgtggagt     180
gttaatactt tgtaagccaa attaaagttt ctaagcagta taaaatgaga atgacatcat     240
cctttcctag tatttccaag tcttagagta ctctacaccc tgttggctat ttatctgggg     300
ttagacttct ggagactttt cagatagact tgaagtctct ggccttgcct gggaattact     360
ggctgcccaa ggaagcactg gagaaggcgg tggtctcctt gcccttgtgg tcctgctgtg     420
gcgcattttg attgagttcc tggttcggct ggtcagagtg gctggatagt gttggcccac     480
tccattcctc aggttttttt gaagcggtgg tcttttaggg agagcctttt gttcctggaa     540
cttccttgac gggtcccttt tcccttctgg gttgtcttgg gaacctcttt ggtgttgatg     600
ggttgttgtt ggaaaatggg ctggaggctc gtggtttcct ggacatcttc accagaccag     660
tgtctctcaa cagtctactc cagtccacct ggtctncccg agcttcccca ggacagtgaa     720
ngcaggccac aggctanaaa ctgtagtcnc ccgacattac aagccaattt gggnctgtgg     780
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gctctgnttt ccaaatcaac cctttcanct tcatttggaa ncccattcag gaaanccccg 840
cgtaccttgc ccgggcgggc cgttcnaaag ggcgaattct gcanaaatcc cttanacttg 900
ggnggnccgt ttnaacctgc cttttaaagg gcccaattnn nccctntnna nnggagcgan 960
taccaattnn ntnggnccgc gttttnaaaa cgnnnnnann tnggnaaaan ccctggggtn 1020
cccc 1024

<210> 94
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 94
ttnngaattg ggccctctag atgcatgctc gagcggccgc cagtgtgatg gatatctgca 60
gaattcgccc ttcgagcggc cgcccgggca ggtacgcggg gcttcctgga tggggatcca 120
gatggaggtg gagggttgat ttgggaagca gagcacagca gcacaaattt gcttgtaatg 180
tcggcgacta cagtttctag cctgctggcc tgccttcact gtcctggggg aagctcgggg 240
agaccaggtg gactggagta gactgttgag agacactggt ctggtgaaga tgtccaggaa 300
accacgagcc tccagcccat tttccaacaa ccacccatca acaccaaaga ggttcccaag 360
acaacccaga agggaaaagg gacccgtcaa ggaagttcca ggaacaaaag gctctcccta 420
aaagaccacc gcttcaaaaa aacctgagga atggagtggg ccaacactat ccagccactc 480
tgaccagccg aaccaggaac tcaatcaaaa tgcgccacag caggaccaca agggcaagga 540
gaccaccgcc ttctccagtg cttccttggg cagccagtaa ttcccaggca aggccagaga 600
cttaagtcta tctgaaaagt cttccagaag tctaacccca gataaatagc cnaacagggt 660
ggagagtact tctaagactt ggaaatctta ggaaagggat gatgtcantc tcattttata 720
ctgnttaaaa actttaantt ggcttacaag tattaaccct tcacagaant ttgtctacca 780
tncagnatca atttggcatc tggtccaaaa ccattttttt agggcanttt gaaaagtcct 840
tnggccggga acaccttaag ggcgantcca gncacttggg nggncgtnan nnnaaggtcc 900
caactcgnnc caaannttgn gnaaacatgg gnnnanatgg gntcctgggg ggaaatgtat 960
ccgnttacaa nttcccncaa nntncnaanc cggannncnt taagggtaaa nnccctgggg 1020
gccc 1024

<210> 95
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 95
gggnnnnnnt taactccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gccctttcga gcggccgccc gggcaggtac tttttttttt tttttttttc 120
cgtctcccca aagctttatc tgtcttgact ttttaaaaaa gtttgggggc agattctgaa 180
ttggctaaaa gacatgcatt tttaaaacta gcaactctta tttctttcct ttaaaaatac 240
atagcattaa atcccaaatc ctatttaaag acctgacagc ttgagaaggt cactactgca 300
tttataggac cttctggtgg ttctgctgtt acgtttgaag tctgacaatc cttgagaatc 360
tttgcatgca gaggaggtaa gaggtattgg attttcacag aggaagaaca cagcgcagaa 420
tgaagggcca ggcttactga gctgtccagt ggagggctca tgggtgggac atggaaaaga 480
aggcagccta ggccctgggg agcccagtcc actgagcaag caagggactg agtgagcctt 540
ttgcaggaaa aggctaagaa aaaggaaaac cattctaaaa aacaacaaga aactgtccaa 600
atgctttggg aactgtgttt attgcctata atgggtcccc aaaatgggta acctagactt 660
cagagagaat gagcagagag caaaggagaa atctggctgc cttccatttt cattctgnta 720
tctcaggtga actggtanan gggagacatt ngaaaaaaat gaaacnacca aaaccattac 780
taatgaggta ccttnggncc gggaacacgc ttaaggcgaa ttttgcagaa atncattaca 840
ctggcggncc gttcagcatg cttttaaagg gcccaattnc cctttaaggg agtcgnatta 900

caatttnant gggccgcgtt ttacaacgtn nggaactggn aaaaccccctg gggtnnccca 960
cttnaannnc cttggnnnan aatccccttt tnccnaantg gggnnnnnnn ccaaaggccc 1020
cnna 1024

<210> 96
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 96
gngnnnnnnn tnngttncga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg 60
atggatatct gcagaattcg cccttagcgt ggtcgcggcc gaggtacctc attagtaatt 120
gttttgttgt ttcatttttt tctaatgtct cccctctacc agctcacctg agataacaga 180
atgaaaatgg aaggacagcc agatttctcc tttgctctct gctcattctc tctgaagtct 240
aggttaccca ttttggggac ccattatagg caataaacac agttcccaaa gcatttggac 300
agtttcttgt tgtttttttag aatggttttc ctttttctta gccttttcct gcaaaaggct 360
cactcagtcc cttgcttgct cagtggactg ggctccccag ggcctaggct gccttctttt 420
ccatgtccca cccatgagcc ctccactgga cagctcagta agcctggccc ttcattctgc 480
gctgtgttct tcctctgtga aaatccaata cctcttacct cctctgcatg caaagattct 540
caaggattgt cagacttcaa acgtaacagc agaaccacca gaaggtccta taaatgcagt 600
agtgaccttc tcaagctgtc aggtctttaa ataggatttg ggatttaatg ctatgtattt 660
ttaaaggaaa gaaataagaa ttgctagttt taaaaatgca tgtcttttaa ccaattcaga 720
atctgccccc aaactttttt naaaagtcaa ggaccgataa agctttgggg agacngaaaa 780
aaaaaannnn aaaaagtacc tgcccgggcn ggccgttcna aagggcgaaa ttcaacacac 840
tgggcggccg gtacttaatg gatcccaact cggncccaac cttggggaaa ncatgggccn 900
taactgggtt cccggggggn aaatggtatt ccggttacaa attccccccc annttccana 960
cccggaaanc cnttaagggt aaaancccctg ggnggcccna angggggggct nacctcccct 1020
tnaa 1024

<210> 97
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 97
gnngnnnnnn nttnnnttat acgccangct tggtaccgag ctcggatccc tagtaacggc 60
cgccagtgtg ctggaattcg cccttagcgt ggtcgcggcc gaggtacatc tgattttata 120
tgttgtccaa actggtcaat ccagttgctt aacacagaaa gcggacagat gatcagtgtt 180
gttcttggtc tctcctcaac atcagttttc tttgacccct ccactgcaca agctcccttt 240
ttcaacattt tcttttttgt tgtaggaaca gatgaagtta atgcacatgc aaatgccaca 300
tcttctataa ccttagaaga tcctttcgcc ctgcctttag tttcagactg tacagaggga 360
gagagagaga gaaagagagc acgccagtga gaaagcgagc gcgagcgcga gcgcaagggg 420
aggagagggt gggagagggc ggaaggggga aagctgtccg tgggagattg tgtcttcatg 480
tccacggggc tgcatctctt gatggtgcac tgaaaaagca gagctcacca gacagagtgg 540
aaaggcaggg ggaggggcag ggagcaacag aaggaagaga caacaagccc aagacagctt 600
ccatctcaga cggaaggccc ccagaagata gaattccagc cgactgaaaa accacccaat 660
gaacaaagaa gattctagaa aatagaagtg ttgggattac aaagttgngc gtttcatcgg 720
tacctgcccg ggcggncgnt caangggcga attctgcaga tatccatcac actggcggnc 780
gntcgagcat gcatntagan ggcccaantc gncctataag ggagtcgnan tacaattcac 840
ttgggccgcg ttttacaacg tctgacttgg naaaanccct gnggttnccc aacnttaaac 900
ggcnttggag nacaattccc ctttttncca anntggggna antnaccaaa agggccccnn 960
accgatggnc cttttncaaa aagttgggcc aaccttgaaa gggcaaaagg gcccccccct 1020

ttaa 1024

<210> 98
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 98
gnngnnnnnn ttnngaatgg gccctctaga tgcatgctcg agcggccgcc agtgtgatgg 60
atatctgcag aattcgccct tgagcggccg cccgggcagg taccgatgaa acgcgcaact 120
ttgtaatccc aacactttct attttctaga atcttctttg ttcattgggt ggtttttcag 180
tcggctggaa ttctatcttc tgggggcctt ccgtctgaga tggaagctgt cttgggcttg 240
ttgtctcttc cttctgttgc tccctgcccc tccccctgcc tttccactct gtctggtgag 300
ctctgctttt tcagtgcacc atcaagagat gcagccccgt ggacatgaag acacaatctc 360
ccacggacag ctttccccct tccgccctct cccaccctct cctccccttg cgctcgcgct 420
cgcgctcgct ttctcactgg cgtgctctct ttctctctct ctctccctct gtacagtctg 480
aaactaaagg cagggcgaaa ggatcttcta aggttataga agatgtggca tttgcatgtg 540
cattaacttc atctgttcct acaacaaaaa agaaaatgtt gaaaaaggga gcttgtgcag 600
tggaggggtc aaagaaaact gatgttgagg agagaccaag aacaacactg atcatctgtc 660
cgctttctgt gttaagcaac tggattgaca gtttggacaa catataaaaa tcagatgtac 720
ctcggncgcg accacgctta gggcgaattn cagcacactg ggcggccgtt acttaatgga 780
tccgaactcg naccaagcct tgcgtaaaca tgggcaatac tggnttcctg nggggaaatg 840
gtaatccggt tacaaattcc ccacaacntt acaanccgga agccccttaag ngtaaaaccc 900
ctgggngccc caaagagtga gctaacttnc catttaaatg cgttngctca atggcccgtt 960
ttccatcggg naaaacctgn ngccantgga ttaangaatc ggncaaancc cccggggnaa 1020
aaan 1024

<210> 99
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 99
aacgccagct tggtaccgag ctcggatccc tagtaacggc cgccagtgtg ctggaattcg 60
ccctttcgag cggccgcccg ggcaggtaca gataaatccg tgcatgcatt gagggagact 120
agagggtaaa atgaaatctg ccccatcctt cttacataca cagtgatagc attttgaatt 180
gttcttctac atttgaaatc ttagctgaaa gatcatcagc caccgacctt ttgtgaagct 240
agttctctag aacatacaat gttttttaaa aaattaaaaa cacagaagga aaaaagcaag 300
aaccaacgat aaatggagct tgtgcagaat ctggcagtgc tgtggacctg cccatctgtt 360
ctcccccgcg tactgactga acacactccc cgctttggtt cctgtaggac gggtgagata 420
ccacaccttg gcaaccacca gtaaaggctc atagtctagc ccttgggagg ccccgatttt 480
agggctgtgc tcggaggcga cctacgttag ggactgggag aagcgggtac ctcggccgcg 540
accacgctaa gggcgaattc tgcagatatc catcacactg gcggccgctc gagcatgcat 600
ctagagggcc caattcgccc tatagtgagt cgtattacaa ttcacttggc ccgtcgtttt 660
acaacgtcgt gactgggaaa accctgccgt tacccaactt aatcgccttg cagcacatcc 720
ccctttcgcc agctgcgtaa taacgaaaag cccgnaccga tcgccctttc cacagttgcg 780
caacctgaat ggcnaatgga cccccccttg taccggcgca ttaaccnccn gccggntnnt 840
ggggtacccc cacgtggacc ggttcacttg gccagggccc taangnccgg ttcntttggt 900
ttcttncctt ccntttttng cccgttngcc nggtttttcc cgtaagcttt taaanngggg 960
gcttcccctt ttangggtcc aaataangct ttacgggncc tttaaccccc aaaaaaattt 1020
nnnt 1024

<210> 100
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 100
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gggnnnnnnn ttnngttcng aattgggccc tctagatgca tgctcgagcg gccgccagtg      60
tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtacc cgcttctccc     120
agtccctaac gtaggtcgcc tccgagcaca gccctaaaat cggggcctcc caagggctag     180
actatgagcc tttactggtg gttgccaagg tgtggtatct cacccgtcct acaggaacca     240
aagcggggag tgtgttcagt cagtacgcgg gggagaacag atgggcaggt ccacagcact     300
gccagattct gcacaagctc catttatcgt tggttcttgc ttttttcctt ctgtgttttt     360
aatttttaa aaaacattgt atgttctaga gaactagctt cacaaaaggt cggtggctga      420
tgatctttca gctaagattt caaatgtaga agaacaattc aaaatgctat cactgtgtat     480
gtaagaagga tggggcagat ttcattttac cctctagtct ccctcaatgc atgcacggat     540
ttatctgtac ctgcccgggc ggccgctcga aagggcgaat tccagcacac tggcggccgt     600
tactagtgga tccgagctcg gtaccaagct tggcgtaatc atggtcatag ctgnttcctg     660
tgtgaaattg ntatccgctc acaattccac acaacatacg agcccggaag ccataaagtg     720
tnaaagccct ggggtgcctn atgagtgagc taactcacat ttaattgcgt tgcgctcact     780
ggcccgnttt cagtcgggaa aactgcntgc cactgcttaa tgaatcggcc acgccccggg     840
gaaaaagcgn ttgcgtantg ggcgctnttc cgctttcttg gttaactgac tcnttgggct     900
ttggccttng gnttnnggnn aacgggttna acttncnttn aaangggggn naatccggtn     960
tnccccgaaa nncggggata acccccggaa anaactttgn ccnaaaggcc cccnaaangg    1020
cccn                                                                 1024
```

<210> 101
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 101
```
gggnnnnnnt tgaatnacac gccagcttgg taccgagctc ggatccctag taacggccgc      60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtacgcgggt attttcttaa     120
atttcttgaa tgttctttat ggtagtgtta ctaaaaagtt tatgatcaca ttttcattgt     180
gaacataatt tgaactcatt atcacacact tggaaaatac agaaaagtgg aggaaaaaaa     240
atcatatccc caccatccaa agacatatac tctcctctta tcttgttcat tcttgtttct     300
gtgcacaggt ttatgattat aactgtgtca aaatgtatat tcaaaatagc tgttacatta     360
cctttgtgga attatggtta aatactttca ctttaatttt ttcaaatgtt ccctataata     420
atgttctgat aacagtgtat tatgtgtgtc tccattggtg tgcataatac atacccagag     480
gaaaaattag aaaataaagt aaattatttt aaaaaattac ctatattccc aacacctaac     540
aactactgct aacatcttga tctgtttcct ctatcttgtt tcagtgcaca cgcttgtgat     600
aacagtgtta aatatgtgtg cataaagtct taaatgaaaa gatgtggaaa ataactaaaa     660
tagtgttgtc attgtgggaa tttggttaaa tattttgtct caaattcctt aaataatctt     720
tggtgttttg gtaataaatt ttaatgatgt attttccatt acaaatataa tacatactca     780
tacaaaactt tggaaaatta gtaaagaaaa ttcacacata ttcccacacc caacaccaat     840
ttaactggtn accatctgga ctgngcncta agctgggatt antttaggng tagtggataa     900
gtatgcctaa aggccaaaaa tgggaagaag gatgaaaanc cngaaaatan ttnccctggt     960
gtnnggggaa taaggggaat ttgggttcgg ttcctttgaa agggcatnnn tttcaagggg    1020
tttg                                                                 1024
```

<210> 102
<211> 1020

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1020)
<223> n = A,T,C or G

<400> 102
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ggagnnnntt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt      60
gctggaattc gccctttcga gcggccgccc gggcaggtac tctttctctc ccctcctctg     120
aatttaattc tttcaacttg caatttgcaa ggattacaca tttcactgtg atgtatattg     180
tgttgcaaaa aaaaaagtgt ctttgtttaa aattacttgg tttgtgaatc catcttgctt     240
tttccccatt ggaactagtc attaacccat ctctgaactg gtagaaaaac atctgaagag     300
ctagtctatc agcatctgac aggtgaattg gatggttctc agaaccattt cacccagaca     360
gcctgtttct atcctgttta ataaattagt ttgggttctc tacatgcata acaaaccctg     420
ctccaatctg tcacataaaa gtctgtgact tgaagtttag tcagcacccc caccaaactt     480
tatttttcta tgtgtttttt gcaacatatg agtgttttga aaataaagta cctcggccgc     540
gaccacgcta agggcgaatt ctgcagatat ccatcacact ggcggccgct cgagcatgca     600
tctagagggc ccaattcgcc ctatagtgag tcgtattaca attcactgcc cgtcgtttta     660
caacgtcgtg actgggaaaa ccctgcgtta cccaacttaa tcgccttgca gcacatcccc     720
ctttcgccag ctggcgtaat aacgaaaagc ccggaccga tcgccctttc caacaggtgc      780
gcaacctgaa tggcgaaatg gacccccccct ggaaccggcg cantaaaccc ccgncgggnn     840
nntngggtac cccccacggg ganccgttca cttggccann gccctaangn cccgttcctt     900
tnggtttctt tccttccttt ttgcccgttt gnccgggttt tcccggnaag ctttaaaaac     960
gggggcctcc ccctttangg gtccnaataa nggcttttac gggnccttng aaccccaaan    1020
```

<210> 103
<211> 1021
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1021)
<223> n = A,T,C or G

<400> 103
```
ggagnnnttn ngnngggccc tctagatgca tgctcgagcg gccgccagtg tgatggatat      60
ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtact ttattttcaa aacactcata     120
tgttgcaaaa aacacataga aaaataaagt ttggtggggg tgctgactaa acttcaagtc     180
acagactttt atgtgacaga ttggagcagg gtttgttatg catgtagaga acccaaacta     240
atttattaaa caggatagaa acaggctgtc tgggtgaaat ggttctgaga accatccaat     300
tcacctgtca gatgctgata gactagctct tcagatgttt ttctaccagt tcagagatgg     360
gttaatgact agttccaatg gggaaaaagc aagatggatt cacaaaccaa gtaattttaa     420
acaaagacac tttttttttt gcaacacaat atacatcaca gtgaaatgtg taatccttgc     480
aaattgcaag ttgaaagaat taaattcaga ggaggggaga gaaagagtac ctgcccgggc     540
ggccgctcga aagggcgaat tccagcacac tggcggccgt tactagtgga tccgagctcg     600
gtaccaagct tggcgtaatc atggtcatag ctgnttcctg tgtgaaattg gtatccgctc     660
acaattccac acaacatacg agcccggaag cataaagtgt aaagccctgg ggtgcctaat     720
gagtgagcta actcacatta aatgcgttgc gctcactggc cgctttncag tccgggaaac     780
ctgtcgtgcc agctgcatta atgaatccgg ncaacgcccc ggggaaaaag cggttgcgta     840
ttgggcgctc ttncgctttc ttggttactg gctccttgng cctcggccgt tccggnttcg     900
gnnaaccggt atcagcttac ttcaaangcg gnaaatccgg tttncccnga aatccggggg     960
ttaacnccag gaaaanaacc tttgaaccna aagggccccn aaaagggccc ggaaccctaa    1020
a                                                                    1021
```

<210> 104
<211> 1017
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1017)
<223> n = A,T,C or G

<400> 104
ggagnnntta atcnacgccn gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac tcagctgtct taataggatg 120
aagccttaag cagtggaaat ttcagttatt ttccacagta ttccattttg gaggatttgg 180
ggtgtttact ttttaaattc ttgaacaact taacctccat gaggctttgt gaagtcagct 240
gtgaccaccc tcctcttact gtgttctcag tattcattca cttccaggga agaatgacag 300
ccacagggag atggtggtgg gcaagaatga gagtcccagg atccagattt agcctcagat 360
cttccccatt caggaagggt tttccattta acaagagcac tagtatgaaa acattaggga 420
caaatctccc atgtctttga aattcggatt ctcctcttga gatccccttc ctcacctgcc 480
aatcaacttt ataaggccac aagtggtcac tggttttcct tccacaggtt tgaggttctc 540
agctttcctt aagcgaccca gcagctccgc tgttttcaga gtgaatatgt taagctttga 600
tgagattcta ttttcagtaa gttagtgctt ctgggacact tggagaaagc tgtgagagtc 660
attggctacg caaagaacaa cgaaagctga tcctaaaagt gatccaatct aagaaaatgg 720
taaaacgagc tctggccaca gcacagaatt ttatgtgang aactcagatt tttgaagact 780
taacaattgc agaaaaaggn tgcagcctgn acacccatag cccaactttt ntgagccana 840
ctttgggttt tgggngggga cntggcacca tgtttgnacc tggccggccg gnccgttcna 900
aagggccaaa ttntggcnga aatnccttac actggggggc cgtttgagca tgcctntaaa 960
ngggcccaan tngnccctta aagggggggcn nnttccaatt nnctgggccc ggttttn 1017

<210> 105
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 105
ggagnnnntt nnntnnngan tgggccctct agatgcatgc tcgagcggcc gccagtgtga 60
tggatatctg cagaattcgc cctttcgagc ggccgcccgg caggtacaaa catgtgccac 120
gtcaccacac aaaaccaaag tctgctcaga gaggtgggct atggtgtgca ggctgcaacc 180
tttctctgca attgttaagt cttcaaaaat ctgagttcct cacataaaat tctgtgctgt 240
ggccagagct cgttttacca ttttcttaga ttggatcact tttaggatca gcttcgttgt 300
tctttgcgta gacaatgact ctcacagctt tctccaagtg tcccagaagc actaacttac 360
tgaaaataga atctcatcaa agcttaacat attcactctg aaaacagcgg agctgctggg 420
tcgcttaagg aaagctgaga acctcaaacc tgtggaagga aaaccagtga ccacttgtgg 480
ccttataaag ttgattggca ggtgaggaag gggatctcaa gaggagaatc cgaatttcaa 540
agacatggga gatttgtccc taatgttttc atactagtgc tcttgttaaa tggaaaaccc 600
ttcctgaatg gggaagatct gaggctaaat ctggatcctg ggactctcat tcttgcccac 660
caccatctcc ctgtggctgt cattcttccc ctgaagtgaa tgaatactga gaacacagta 720
aggaaggagg gtggtcacaa gctgacttca caaagcccta atgganggtt aagttggtca 780
agaatttnaa aagtaacccc cccaaatcct ccaaaaatgg gaatactggt ggaaaataac 840
ctggaaattn ccctggttta aggcttcatt ctattaagac cgcttgagta cccttggccg 900
ngaacccccct taagggcgaa ntncaacaca ctgggngggc cggtacctaa nggatcccaa 960
ctnggnaccc aancnttggg gaaancatng ggccataact gggttcccgg ggggaaatgg 1020
taat 1024

<210> 106
<211> 1007
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1007)

<223> n = A,T,C or G

<400> 106
ggagnnnntt aaacgccagc ttggtaccga gctcggatcc ctagtaacgg ccgccagtgt 60
gctggaattc gcccttagcg tggtcgcggc cgaggtacac agaatagctg agcagttcac 120
ttcagggatc aggtcatctc tgctcctcct agtttcacca tgttctggca ataaaaaaca 180
catattatat cctggttttc tctatccttg cattactaag gtgactgtct ctctttatac 240
atccttgtat ggttctccca gtattagcaa gattgtatat ctgtaaagaa tgtccagttt 300
tgtaaatatt tccctgcctt tttttttctt tttttacatc tgattttaat gcttcgttaa 360
cttcaaaagg aactggtaga gttcagaagg tgagctgttg tttttctaaa cctcttccca 420
ggaaggggac attgacactt gaatttttgt cacctttttc ctcattagaa ggaaagtaga 480
aagccttact gtaggatttt taaaaaaaaa tccatctcac cccatattgg tcttaaataa 540
gtatagacta attaacctaa gctaccttta acaacgtaga atttaanatg ggttcatata 600
tgtgagaaaa acctgaatat aggacagggg tcctactttt ttccccacct ctgtcgccca 660
ggctagagta ntaantggtg gatcttggcc cactgcaacc tctgcttcta gggtcaagtg 720
attctcctgc tcagcctncc aagtancccg ggaattggaa gagtatgcca ccacgcccag 780
ctacttttttg gaattttagt nnaaaacagg ttcatcatgn tggncccnga agggcnctta 840
antcctgncc ttnagngatc cccccnnana ngaaaccntg gncnncccaa nnnncnggnn 900
tntagcnnnn ccnccgngcc canncctactt tnnnaannnn nnnnnnnnnn nnnnnnnnnn 960
nnnnnnnnaa nnngnncnnn nccngnnngn ccnnnnnngg gnaantc 1007

<210> 107
<211> 1024
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 107
gnagnnnnnn nngattgggc cctctagatg catgctcgag cggccgccag tgtgatggat 60
atctgcagaa ttcgccctta gcggccgccc gggcaggtac tttttttttt tttttttttt 120
tttttttttt aattaattag aaagtaggct gggcacggng gctcatgcct ataatcccag 180
cacttgggga ggccgaggat ctcctctctg gnggatcact tgagggcagg agttaagaga 240
ccatcctggc caacatgatg aaaccctgtc tctactaaaa atacaaaaag tagctgggcg 300
tggtggcata ctcttacaat cccggctact tgggaggctg aggcaggana atcacttgaa 360
cctaggaagc agaggttgca gtgggccaag atcacaccac tatactctag cctgggcgac 420
agaggtgggg aaaaaagtag gacccctgtc ctatattcag gtttttctca catatatgaa 480
cccatctaaa ttctacgttg ttaaaggtag cttaggttaa ttagtctata cttatttaag 540
accaatatgg ggtganatgg attttttttt aaaaatccta cagtaaggct ttctactttc 600
cttctaatga ggaaaaaggt gacaaaaatt caagtgtcaa tgccccttcc ttggggaaga 660
ggtttagaaa aacaacagct caccttntga acttttacca gttccttttt gagttaaccg 720
aagcnttaaa aatcagatgt aaaaaangaa aaaaaaaggc cgggaaattt ttaccaaact 780
nggacattct ttacagatat acaatcttgc taaaacctgg gaaaaccctt cccngggtgt 840
ttaaagggga aacagtcccc cttataatgc ccggggttna gaaaancccg gattttnnaa 900
aaaggggttt tattgcccaa aactggggga accttngggg ggncccaaaa nnaacctgan 960
cccctgaagg naccgggtnn annnnntttt tgggaccttg gccgggaacc ccctttnggg 1020
ggna 1024

<210> 108
<211> 470
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(470)
<223> n = A,T,C or G

<400> 108

```
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc       60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtactattt tttttttttt      120
ttttcgtgtn tttgacattc cttgaatctg ttttttattc cccttccaca gaacaggcct      180
gggactttcc aacaccctgc taaggaagtt ctgtgtccaa gtcccaccca ggctgggttg      240
tccccacctn ctncagccca cacagcccag gcagcatccg ggccagtgcc ctgcatgaca      300
nagggtcttt gttgtgtaat gnttgttccc aagttgcatt ttctaaccga atcagtgtgt      360
tttcatgaaa ctgagtgtta ctgtggacca gtaagttnct ctgttgtctt cagtggtctt      420
cctgtgtggc tcaagggttc tctgtgagag tctggatttt catttctggg                 470
```

<210> 109
<211> 808
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(808)
<223> n = A,T,C or G

<400> 109

```
gggcctctag angcatgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt       60
agcgtggtcg cggccgaggt acaagtctgc ctaagagaca gaagtgagtn ttataatcta      120
cttggccatt cctcccagca gagaagcagc aggtagatat ggcatgcact gtgcctgctg      180
ctgctgctct tgtggcgaac actcagatgt ggaaccatag agggaccttg aggagctggg      240
acatgattct ttagagaaga gaagagacgg ggagcacagc atgagaatgg ccagtcaacc      300
catttcaaat tcttttatta aagtgccccc cgaggggcct tgcacaaaga tgatggggag      360
agcagaactg ctgctccttg acagaactct gatccttaca ctttgtttgg agtgggcttg      420
gggacagtca caagccatga aacatgaatc caaaatggtc cccagatgag ccatggtgaa      480
ccaacagatg caagcaactt cttaaactgc tctattaaac actgctttat atgtgtcccc      540
atgatacaga aaagtgggat ggggccagcc attccagaaa tgaaaatcca gactctcaca      600
gagaaccctt gagccacaca ggaagaccac tgaagacaac agaggaacta ctggtccaca      660
gaaacactca gtttcatgaa aacacactga ttcgggtaga aaatgcaact tgggaacaaa      720
cattacacaa caaagaccct ctgtcatgca gggcactggc ccggatgctg ctgggctgtg      780
tgggctggaa gangtgggga caacccac                                         808
```

<210> 110
<211> 471
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(471)
<223> n = A,T,C or G

<400> 110

```
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggcccgc       60
cagtgtgctg gaattcgccc tttcgagcgg ccgcccgggc aggtacagcg acgtgatgat      120
gtagaggcgc ttcccatcca ggctgagctg gatcatctga gggcctncag ccacccgttt      180
tcccttgacc actaggggct ctggctggga ctttagttcc tcgtcctcca gcacttgcac      240
agggcctccc ttaacaatgc tgcctccgag gaagagctgt cctgtgaggc ggggtctctg      300
tgggtcagag atgtcatact gcctcaggtc cccatgcagc cagttgctga agtagaggaa      360
gcggtcgtcc agggagagca ggatgtcggt gatcaggcct ggcatttcgg gcagcagcca      420
gcccttcact ttcttggggg gcacctggat caccttctcc actgaccatg t               471
```

<210> 111
<211> 468
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(468)
<223> n = A,T,C or G

<400> 111
actatgacca tgattacgcc aagcttggta ccgagctcgg atccctagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt acttnnttnc tttntttaca 120
tctgatttta atgcttcgtt aacttcaaaa ggaactggta gagttcanaa ggtgagctgt 180
tgttttncta aacctnttcc caggaagggg acattgacac ttgaattttt gtcacctttt 240
tcctcattag aaggaaagta naaagcctta ctgtaggatt tttaaaaaaa aatccatctc 300
accccatatt ggtcttaaat aagtatagac taattaacct aagctacctt taacaacgta 360
gaatttagat gggttcatat atgtgagaaa agcctgaata tangacaggg gtcctacttt 420
tttccccacc tctgtcgccc aggctggagt atagtggtgt gatcttng 468

<210> 112
<211> 813
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G

<400> 112
attgggcctc tnnagcatgc tcgacggccg ccatgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtaccatg ctgacttctt ggtatctttt anggcctaat 120
tttcccttcc ttgagattac tgtagtgtgt tccagctaat ttctatttgg aaacgagttg 180
gaacagctga aaactaggta ttattgaagg caaagcagcc tcacgtcagt tttttatcag 240
ctcatttggg aagttttnnt tttttttntn ttaattaatt agaaagtagg ctgggcacgg 300
nggctcatgc ctataatccc agcacttggg gaggccgagg atctcctctc tggtggatca 360
cttgagggca ggagttaaga gaccatcctg gccaacatga tgaaaccctg tctctactaa 420
aaatacaaaa agtagctggg cgtggtggca tactcttaca atcccagcta cttgggaggc 480
tgaggcagga gaatcacttg aacccaggaa gcagaggttg cagtgggcca agatcacacc 540
actatactcc agcctgggcg acagaggtgg ggaaaaaagt nagacccctg tcctatattc 600
aggctttgct cacatatatg aacccatcta aattctacgt tgttaaaggt agcttaggtt 660
aattagncta tacttattta agaccaatat ggggtganat ggattttttt ttaaaaatnc 720
tacagtaagg ctttctactt tccttctaat gaggaaaang gtgacaaaaa ttcaagtgtc 780
natgcccctt cctggggaag aggtttaaaa aat 813

<210> 113
<211> 506
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 113
nccaacttgg taccganctc ggatccctag taacggcana cattganctg atacgccaag 60
cttggtaccg agctcggatc cactagtaac ggncgccagt gtgctggaat tcgcccttcg 120
agcggccgcc cgggcaggta cgcggggcct ctggcgctac catggcgttt ggcaagagtc 180
accgggatcc ctacgcgacc tccgtgggcc acctcataga aaaggctaca tttgctggag 240
ttcagactga agattggggc cagttcatgc acatctgtga cataattaac actacccagg 300
atgggccaaa agatgcagtg aaagctttga agaaaangat ttncaaaaac tacaatcata 360
aagaaatcca acttaccttg tcacttattg acatgtgtgt gcagaactgt ggtccaagtt 420
tccagtctct gattgtgaag aaggaatttg ttaaagagaa tttagttaag ctactgaatc 480
ccagatacaa cttgccatta gacatt 506

<210> 114
<211> 813

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(813)
<223> n = A,T,C or G

<400> 114
gggcccntnn agctgctcga gcggccgcca gtgtgatgga tatctgcaga attcgccctt 60
agcgtggtcg cggccgaggt acaacttatt ctaaatattt tcattttctg tgttctaaat 120
agaaatatta agttgcagta aaaagagaaa aaaaggctat ttagcattac aaagaatcat 180
atttaaaggc tgcccaatgt agagtctagt gacctgttca ggacacctga aatataatta 240
aatgacaatt atcaaggttt taacaattta taattctaaa ccagaggatt ataaagaagt 300
gcaaattgac ttttacattc aactttagtt aaatgaaggc actcagtatt cttcctgaat 360
aatacattca gtttctcaca ttttatgctt tcatctattc agaattattt catagtaaaa 420
taatctactc ttatcacagc tgtgtgacga tttctaaatg taggaaggcc tgtgaaacat 480
gacactgcag ttaaattggt tggcctaagg actaagtaat ttttcttctg ctgaagtttt 540
aagtgagtat ttgttccaaa caagttctgt tgaaatctca cgctgttgtc aggaatcagt 600
gttatcctgg aactgttatt ctatttaatc ttcattatag cagaaatgtg ccaccatggc 660
tttgacatgt tggtaggtat tgtcttccag gcttcaaagc tgcacagagt ctacgtttta 720
gagagttggc acctttgatg tggtagtgag ctgatcatnc actttcttct cagtcaccat 780
cattttgagc tcctttgtgc tggtgagcat can 813

<210> 115
<211> 471
<212> DNA
<213> Homo Sapien

<400> 115
accagctatg acctgattac gccaagcttg gtaccgagct cggatccact agtaacggcc 60
gccagtgtgc tggaattcgc ccttagcgtg gtcgcggccg aggtaccatg attttgtgtt 120
caggaaacaa agaacatgaa atattacatt cttcagaatg tttttcttgt gccattaaat 180
gaatcaagta aatgaggcaa tgaggcacaa ataaggaatt tagatttcag caatattttg 240
atccactgta gctttcagtt tctgaaactt tggaagggcc tacatacttt gtaagaattt 300
ttggcttata ttgttaataa tcaacagagc caagaaaaca tttcttagaa tgttcaaaga 360
caccacctta gccttccttc cctgcagcta taacattatt tttctaagag aaaaggcaga 420
gagtcttcac aaagccatac cagacttaaa attaccagag aacattttgg t 471

<210> 116
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 116
ttncannggg cccctagagc atgctcgacg gccgccatgt gatggatatc tgcagaattc 60
gccctttcga gcggccgccc gggcaggtac tttttttttt tttttttttt ttttttttgtg 120
tgtggtcttg aactcctggc ctcaaatgat cttcctgcct cagcctccca aagtcctggg 180
attactggca tgagtcacca cacctggctc attctttttc ttaatatggc tctaaatggc 240
tttttatttt ttttgctttg gcaatttatt tctaggaaat taaataattc tttcattata 300
atcaagggaa tgaaagactt caggaggtcc atagtggagt tcaaaaccat atggagttca 360
ctattctaca agattataca ggcaataata taagtattct aaggtgtttt aggtagattt 420
atagatgtta gatttcaaaa tgggttaata agtgtttatg aatttccaag gtgtatcact 480
aacttctcaa gatgaaatca tatatagaaa ctatcaaaat tttccttgtt ctgctgtcaa 540
gaaatgaata atatacactg atataactgt aactcacatc taaagggata gtgcttgaat 600
aagctaattt acaatgagtt caaggtatta ttttaaaatt cttattgncc ttagacaata 660
attatgccaa caaatgtgaa aaatattaaa tctccttctg ntaatttttc cagttttatt 720

acccaaaagt cacacaggta atgcaagtca tgaaataaat caaatgagcc cttcctggag 780
agcctacttt atttaccttg ggaaaatgga tgacatnt 818

<210> 117
<211> 467
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(467)
<223> n = A,T,C or G

<400> 117
accactatga cctgattacg ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc ctttcgagcg gccgcccggg caggtactac tggttttctc 120
cctggcttca cgtgtctctg tgttccccta tgctggggtg tcctcccagt gctttcaggc 180
ttcatctcct tcctaacctc tcctttctat tttttttttt tttttgaga tggagtcttg 240
ctcagtcgcc cangctggag tgctaacctc tcctttcatg tggagatgga cagggatggc 300
aggagcactg agtgctcttg acaacaccat tgaagatgat gctgacgatc agctaccctg 360
tggagaaggc aggccaggct gggtgagagg ggagctcctt ggaagtcagg gggtctgtaa 420
ggacagcaag gatctctttg tcccaacctc cagcagcctt tatgggt 467

<210> 118
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 118
gggcctctna agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgccctta 60
gcgtggtcgc ggccgaggta cctggggtct cagggttgct ctgggcctga tcatccactc 120
agatctgtaa ggaggatttg caggatccat ttagaaagat cctcccttac ttccacaagc 180
atggcctttg gctcttaaat acctgtgctg gggtttgta attatagaaa caacaggaac 240
caaaactcat taatgttgag ctacaaacca gagggaagct tctttctcaa aacagggctc 300
aggcctagaa aaatctagtt ttctgaaatc gctagccagc aacagcactg agatggccat 360
cccagaaaca aggccaacac agaagcaccc ataaaggctg ctggaggttg ggacaaagag 420
atccttgctg tccttacaga ccccctgact tccaaggagc tcccctctca cccagcctgg 480
cctgccttct ccacagggta gctgatcgtc agcatcatct tcaatggtgt tgtcaagagc 540
actcagtgct cctgccatcc ctgtccatct ccacatgaaa ggagaggtta gcactccagc 600
ctgggcgact gagcaagact ccatctcaaa aaaaaaaaaa aaaatagaaa ggagaggtta 660
ggaaggagat gaagcctgaa agcactggga ggacacccca gcatagggga acacagagac 720
acgtgaagcc agggagaaaa ccagtagtac ctgcccggcg gccgntcgaa agggcgaatt 780
ccagcacact ggcgggccgt tactagtgga tccct 815

<210> 119
<211> 811
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(811)
<223> n = A,T,C or G

<400> 119
gggcctctnn agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac tctatttttt gcttgtatga ttgatgggtc tttcattatc 120

```
tgtgattgac attctatgag taggtgcttt tgctttgcct ataagtcgtt attatgaagg     180
aggaatggtg aataagaagg taatttagaa aagcctatat taaatatacc atgaacattg     240
aatatagcaa gatcttattc tctagttgtt atcttagttg ataaattctg tatgtgttat     300
gtgtttgtgt atacatatgt acttaatctg atcggtatct aaaagaagga aaggatggtc     360
aggaaacatt tatcataaat gtagccaagg atatcaatta gggtagacaa gaataggaca     420
aaaataggcc agagctcctg aggaggtgat atgggtccct tgatttgcag aaaatgacag     480
cctatccaag tggcccagtg tatgcctccc agtagcagtg ggcatgtaaa ctgcagcgac     540
cttattttta aaaccaaaaa cctagtatgt ggacaaagaa catgacaata tttggtacct     600
gcccgggcgg ccgctcgaaa gggcgaattc cagcacactg gcggccgtta ctagtggatc     660
cgagctcggt ccaagcttgg cgtaatcatg gtcatagctg gttcctgtgt gaaattggta     720
tcccgctcac aattnccaca cacatacgaa cccggaagca ttaaagtgta aaagcctggg     780
gtgcctaatg aagtgagcta ctcacattaa a                                    811

      <210> 120
      <211> 466
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(466)
      <223> n = A,T,C or G

      <400> 120
anttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg tacccacgtt ttgctccaca     120
ctccttgacc acaggggctc ggacacaaac ccctgtcacc aggagagtca gtcagcacta     180
cttgggaggg ctaaagggaa atttggaaat aaaattccaa agtttggagt aaaaaaattc     240
aagtgttgat tttatattct ttccctttct gacacagcct aaagcgtagg gggaacatgt     300
gtttatctgt gggagataaa caagatggag tcccaaagac tttaacaaaa tattttttta     360
aaaatccact agaatagaaa atacattatt tagatatact ttatgctgag agtgagtata     420
tatgcttgtc ctatttaaac ttgtgagaaa aagtggtatc ccttng                     466

      <210> 121
      <211> 812
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(812)
      <223> n = A,T,C or G

      <400> 121
ttgggcccnt nnagcatgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc      60
cttagcgtgg tcgcggccga ggtacaactc tccagggcac aatacgttta cagctgcctt     120
tccttcacat acttttctaa ttcagaacta ctcacaattc taagcaaatt cccattcacg     180
aagtctgtcc ataatgcgac cttctctttt tttaacatat acatcttaaa aaacaaatat     240
ataaaaaatt cttatttgc tggaatgctt tcaatttttc acattttaca tgatcatcac     300
atttatttct tatattgaaa ggcatggttt ctgttgacat gtcgtgcaaa gccaaaaaaa     360
aaaaaaaaaa aaagggctgg attgcttttc aattggtcta acacttttcc ttgtctaggc     420
tttggatttt aaagttcatg acagccccac caccagtaga aaccccaagg cttgcatttc     480
ctggtaatcg actggaaacg tcccctgttg gccatgctaa gattccttca acagggtcat     540
cctgcattta ttctccttct gccccacccc cacaatgaaa caagatagcc cccatatttc     600
taaatgtatc aagggatacc actttttctc acaagtttaa ataggacaag catatatact     660
cactctcagc ataaagtata tctaaataat gtattttcta ttctagngga tttttaaaaa     720
aatattttgg taaagtcttt ggggactcca tcttggttat cttccacaga taaaccatgt     780
tccccctacg ctttaggctg tggtcagaaa gg                                   812

      <210> 122
      <211> 467
      <212> DNA
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<213> Homo Sapien

<400> 122
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg taccatgctg acttcttggt 120
atcttttaag gcctaatttt cccttccttg agattactgt agtgtgttcc agctaatttc 180
tatttggaaa cgagttggaa cagctgaaaa ctaggtatta ttgaaggcaa agcagcctca 240
cgtcagtttt ttatcagctc atttgggaag tttttttttt tttttttttt ttttaattaa 300
ttagaaagta ggctgggcac ggtggctcat gcctataatc ccagcacttg gggaggccga 360
ggatctcctc tctggtggat cacttgaggg caggagttaa gagaccatcc tggccaacat 420
gatgaaaccc tgtctctact aaaaatacaa aaagtagctg ggcgtgg 467

<210> 123
<211> 864
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(864)
<223> n = A,T,C or G

<400> 123
gggcctctng agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gcccgggcag gtactttttt tttttttttt tcttttttta catctgattt 120
taatgcttcg ttaacttcaa aaggaactgg tagagttcag aaggtgagct gttgttttc 180
taaacctctt cccaggaagg ggacattgac acttgaattt ttgtcacctt tttcctcatt 240
agaaggaaag tagaaagcct tactgtagga tttttaaaaa aaaaatccat ctcaccccat 300
attggtctta aataagtata gactaattaa cctaagctac ctttaacaac gtagaattta 360
gatgggttca tatatgtgag aaaaacctga atataggaca ggggtcctac ttttttcccc 420
acctctgtcg cccaggctag agtatagtgg tgtgatcttg gcccactgca acctctgctt 480
cctaggttca agtgattctc ctgcctcagc ctcccaagta gctgggattg taagagtatg 540
ccaccacgcc cagctacttt ttgnattttt agtagagaca gggtttcatc atgttggcca 600
ggatggnctc ttaactcctg ccctcaagtg gatccaccag agaaggagat cccttggnct 660
tccccaagtg cctggggatt attaggcatt gaagcccacc cgtggcccca agccctacnt 720
tttcttaaat taaatttaaa aaaaaanaan nnnnnnnnnn nnaaaaaaaa ccttttcccc 780
aaattgganc ctgggtttaa aaaaacctgg acccttnaan gggcntggnt tttggccctt 840
tnaaataaat tncccctaag gnnt 864

<210> 124
<211> 467
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(467)
<223> n = A,T,C or G

<400> 124
antatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacatgcac acacacacac 120
acacacacac acgtgtctac tgggctcctt ttggattttt tagttcaatc agaaatcacc 180
aaacagatca ataaagaggc aatgttaaat gaccgggaaa ttggtaatgt gacatcacaa 240
cactgccttt aaggtgccat atctaaatcc aggtagcact gctgctagca gaatctgttg 300
ttttaggaga caagggtggg ctgggtatgc tggctcgtgc ctataattcc agcactttga 360
gagggcaagg caggagaacc acattaggct aggagtttan gaccagcctg ggcaacatag 420
tgagatccca tctctacaaa aataaaaaaa ttagctttcc agctgct 467

<210> 125
<211> 833
<212> DNA

<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(833)
<223> n = A,T,C or G

<400> 125
gnnnnnnnnn ngnnttnnnn ntttaataga tgagcgtacg gngcctgtaa agcatgctcg 60
agcggccgcc atgtgatgga tatctgcaga attcgccctt agcgtggtcg cggccgaggt 120
acctgatatc gtttaacttt cctctttatc tttcttagag atacttcaca tgtgggacag 180
attatatttt ggaaagatgt ccacaacaat attgcccatc ccacattgct catcttacaa 240
tgtgatctca agactcctcc cactgagtgg gtgagaaggg acttatacca ctttcatttg 300
aatctaggca gatctgtgtg acagccttga ccaatagagt atggttaaag tgatgccccc 360
aggcatggtg gcccatacct ggaatcctgg tttttccggg aggcccaggt gggggtagag 420
gtgaggggga tgattgtttg aacacacgag tttgagacta ccctgagcaa cacaatgaga 480
ccctattttt ttttaatgat ttctgaagca gaatcacaaa tagccgtgcg tttttttctt 540
gcgcttttag gatacttact tttaaaaccc agtcaccata ttgttaggaa gcccaaacag 600
cacacataga gagacatacg gagaagccaa ccatagaggt tcctgttgac agctcantcg 660
aggtcttaac caacagtcat acttagctgc cagccatatg agtgaagggc ttncagatga 720
ttctaacgcc cagcagttgg gtccccccag cctgtaagcc ttcccagctg aggcctnaca 780
atgatggagc anagaaaagt gtccctgtcc aaattctgac ccatgataaa atg 833

<210> 126
<211> 788
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(788)
<223> n = A,T,C or G

<400> 126
nnnnnnntnn nnacanttga ctgataccca acttggtacc gactcggatc cactagtaac 60
ggccgccagt gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac gcgggggatc 120
agagagaagc gaggttctcg ttctgaggga caggctcgag atcggctgaa gagagcgggc 180
ccaggctctg tgaggaggca agggaggtga gaaccttgct ctcagagggt gactcaagtc 240
aacacaggga acccctcttt tctacagaca cagtgggtcg caggatctga caagagtcca 300
ggttctcagg ggacagggag agcaagaggt caagagctgt gggacaccac agagcagcac 360
tgaaggagaa gacctgcctg tgggtcccca tcgcccaagt cctgcccaca ctcccacctg 420
ctaccctgat cagagtcatc atgcctcgag ctccaaagcg tcagcgctgc atgcctgaag 480
aagatcttca atcccaaagt gagacacagg gcctcgaggg tgcacaggct cccctggctg 540
tggaggagga tgcttcatca tccactttca ccagctcctc ttttccatcc tcttttcctt 600
ctccttcntt ttctnctnct nctnctgcat ctntaatacc aagcacccca naggaggttt 660
ctgctgatga tgagacaccc aaatncttcc anagtgctna anatagcctg ntncttcccc 720
cttnggncnt gctttccctt ncnttanatt naatnctgat taaggggttc cancanncca 780
aaaggaat 788

<210> 127
<211> 766
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(766)
<223> n = A,T,C or G

<400> 127
gggcctctna agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tactccaggt agttttcctg cacccaatct tgggtgagca 120

gcttcctggg ctccccataa atgaggtgct ccatcccatc atacagcccc atcatattca 180
gtgcttccca gatgacctcc tcaggggtgc agtagccctc tatgaagatt atgcttagga 240
taagtatgag aatgccagtc ttgggcatgc tctggacatc actcagcatc ccatcatagg 300
tgaggcccag ggaggtgaca aggacaaagg agtggccagt gggatccact tcctttacat 360
caatgccaaa gaccagcagc atgcactcgg aggcttcact aaacaacaaa gggaagtggt 420
cttcataatt ttttatgaca ctctccagta tttctgcctt tgtgatcggc tccttcattt 480
gatacttgaa gagcagaaac tgcaccaaat cagtcacctt ttcatctatc tcacttctgg 540
gtaaagactc actgtctggc aggacctgta gggtgcttgg actctcctcc ttttggctgc 600
tggagccctc atcagattga tctaatggaa gggaagcaac gaccganggg gaggagcagg 660
ctatctgagc actctgggga ggatttggtg tctcatcatc agcagaaacc tnctctgggg 720
tgcttgggta ttagangatg gcaggaagaa gaagangaag aggaag 766

<210> 128
<211> 779
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 128
gnnnnntnnn nacactantt tnngacccgn canctggtac cgactcggac cactagtaac 60
ggccgccagt gtgctggaat tcgccctttc gagcggcccg cccgggcagg tactcctcat 120
cctgcgtttg gtctccaggt gtcgcctttc tgccgtgttc ctaatatttt gattcctgtc 180
ttgaaaaaag cacctgctgc acagtaagcc cagggatgtg gcagctgcag cgggcttggc 240
tttgtgagga accgggtgtg tccacgttgg gggaacatca tacttgatac acacgttttt 300
atttgcacaa agaaaatgct atttttggag ccagaatttt catgtctgat ttatggtgat 360
tttcttaaga accagaactg ctggcagaaa gggggcaccc acacgcttag atagccgatg 420
tcttattaga gggcagtttg tggttcctga tttggaaatt aatattctcc aaacattcca 480
gtccaatgaa agtttttatcc gctttcccat gtaaaaattc ttcccatgag agtgacttga 540
tcctcacaat cccgttgaag tcgtgtgtga gtcctacagt attaggttca gcattgccgt 600
ctncaagtgc tctttgtagg gaaacagttt ctggtcatga caagcttcca cttccatctg 660
atcctggcct ggcctggaaa cagagcacat gtgtttgagg atggcngtgt ttggggacag 720
gacatgancg tattgtgtgg ggctgctagg acangcgtgg tgtggtgggg gantgtccn 779

<210> 129
<211> 774
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(774)
<223> n = A,T,C or G

<400> 129
ttnnnantgg gcccntngag catgctcgac ggccgccatg tgatggatat ctgcagaatt 60
cgccccttagc gtggtcgcgg ccgaggtacc tgggtgggac tgggaaactg tgaaacaagt 120
agactgactt ggacactccc ccaccacacc acgcctgtcc tagcagcccc acacaatacg 180
ctcatgtcct gtccccaaac accgccatcc tcaaacacat gtgctctgtt tccaggccag 240
gccaggatca gatgggaagt ggaagcttgt catgaccaga aactgtttcc ctacaaagag 300
cacttggaga cggcaatgct gaacctaata ctgtaggact cacacacgac ttcaacggga 360
ttgtgaggat caagtcactc tcatgggaag aatttttaca tgggaaagcg gataaaactt 420
tcattggact ggaatgtttg gagaatatta atttccaaat caggaaccac aaactgccct 480
ctaataagac atcggctatc taagcgtgtg ggtgccccct ttctgccagc agttctggtt 540
cttaagaaaa tcaccataaa tcagacatga aaattctggc tccaaaaata gcattttctt 600
tgtgcaaata aaaacgtgtg tatcaagtat gatgttcccc caacgtggac acacccggt 660
tcctnacaaa gccaagcccg ctgcagctgc cacattcctg ggcttactgt gcacangtgc 720
ttttttaag acaggatcaa atnttaggac ccngnanaan gcaacacctg gaga 774

<210> 130
<211> 803
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(803)
<223> n = A,T,C or G

<400> 130
```
ggnnnnttnn anacgnatcn gacctganta cgccaacttg gtaccgagct cggatccact      60
agtaacggcc cgccagtgtg ctggaattcg cccttagcgt ggtcgcggcc cgaggtacct     120
tggaagttat gtcattaata taggctggtt cgtcaaataa agcaaaacct tgcaatatca     180
gctagattta cactccggga cgttgcccaa aggtaggaag aaagcagagg gaaatatttc     240
agtcatcatt tccaaagtca ttatcaaaat ctgtgaggaa gtttaatctt ccaaagagtc     300
aatgtcagac atcaggcctc tgttgcctgc ttctctcgag gcactagatt aggagtcttc     360
aataagagac ttaacatgag gtatatggaa gatgaggcac cgagataagt tcatcattag     420
gtgtgagcac tgctcaccct tgctggcaag ttctccttaa gggcctgaag cacaggtgtc     480
caaagaaaag cgttaagtcc atcttaatag aatctatgtg gtatatgatg tggtcagccc     540
ccggtctgtg atcagcaaga acctacagca cagattatgc cctgcccact tcaatgaata     600
cctactctcc tncattctcc atcacttttt ttgctatcaa gactccggac cttgcccatg     660
gagaagttta gagaggaact cttgtggaga gctggtttat tttctgccct gtgcgacgag     720
tttcagcttg gccaaagaaa ggagtcaagg ttattaaaaa gcatcacaat ggtagatctt     780
ccaggcttgg nttttttgt ttt                                               803
```

<210> 131
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 131
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antgggcctc tnnagcatgc tcgacggccg ccatgtgatg gatatctgca gaattcgccc      60
ttngcccgct ttccagncgg gaaacctgtc ntgccagntg cattaatgaa tcngccaacg     120
cgcggngaga ggcggnttgc gtattgggcg ctcttccgct tcctcgctca ctgactcgct     180
gcgctcggcc gttcngctgc ggcgagcggt atcagctcac tcaaaggcgg taatacngtt     240
atccacagat caggggatan cggcaggaaa gaacatgtga ncaaaaggcc agcaaaaggc     300
caggaaccga aaaaaggccg ctttgttggc gtntnaccat aggctcnncc cccttgacna     360
gcttcacaaa aatctacgct cagntcccag gtgcnaaatc ccganaggac tntaangatt     420
cnnggnnttt ccccctgaan nctncctant gcgctctcct gtnccaacct tgccgtttac     480
cggatacctg nccgcctnna tnccttcgng aagcntggct tttnaatngg ctcacttttt     540
gggnatctaa aancggnnta ggcngnncgt tnnaaantng nnttttttgcn caaacccccct     600
gtttaaactn acccatgngc attatcccgg aaacttttgg tnttngaatc caaccnggna     660
aanacacnan ttaatnngcc nttggcntga aacccacttg ggtnaaccat ggattttggc     720
ncnaccnagg gtnnttttnn nggcnggtnc ntacccggag ttctttnaaa acngggtggg     780
cncttanacc tatcnggnnt tccccctttan aaaaaaat                             818
```

<210> 132
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)
<223> n = A,T,C or G

<400> 132
acnntatgac ntgantaccc aacttggtac cgactcggac cactagtaac ggccgccagt 60
gtgctggaat tcgcccttcg gcccgcccgg gcaggtacct ggaaaataac ttctttcttt 120
tcctctagat tttcgaagaa gcaaataaat caagaataga aacctatata taggaggttg 180
ggcctcctgc aaagaatgaa gcactttttg ttaaatacag gagaggctac ttggctgcac 240
taatatgtgc tttttggaat cttatagagt gtcaccaagt tgaactttgg aatggcttga 300
atcatccctg gagcatctgt gccgggcagt caggagtgag tgcaccgcct cccacccagc 360
cccattgggc ctcacaccct cttcattcct ttccccatga ggcaggcaaa cacggtcatg 420
accattttgg ggttcacttc aaccaggtct tctggcaggg catacactct tgctccaatt 480
tttcgggcca tagagatggc atattttgca ttgttgagtt tctcatcatc attcagattt 540
tctgtcttca gaaggtcata gttaatggaa cctggttgga tggcatcgat gangtccaga 600
acaggcagac ttgtacctcg gccgcgacca cgctaagggc gaattctgca gatatncatc 660
acactggcgg gccgntcgag catgcatcta ganggcccaa ttcgccctat agtgagtcgt 720
attacaattc actgggccgt cgttttacaa cgtcgtgact gggaaaaccc tgcgttn 777

<210> 133
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)
<223> n = A,T,C or G

<400> 133
ntgggcctct nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg tacaagtctg cctgttctgg acctcatcga tgccatccaa 120
ccaggttcca ttaactatga ccttctgaag acagaaaatc tgaatgatga tgagaaactc 180
aacaatgcaa aatatgccat ctctatggcc cgaaaaattg gagcaagagt gtatgccctg 240
ccagaagacc tggttgaagt gaaccccaaa atggtcatga ccgtgtttgc ctgcctcatg 300
gggaaaggaa tgaagagggt gtgaggccca atggggctgg gtgggaggcg gtgcactcac 360
tcctgactgc ccggcacaga tgctccaggg atgattcaag ccattccaaa gttcaacttg 420
gtgacactct ataagattcc aaaaagcaca tattagtgca gccaagtagc ctctcctgta 480
tttaacaaaa agtgcttcat tctttgcagg aggcccaacc tnctatatat aggtttctat 540
tcttgattta tttgcttctt cgaaaatcta gaggaaaaga aagaagttat tttccaggta 600
cctgcccggg cggccgaang gcgaattcca gcacactggc ggccgttact agtggatccg 660
agctcggtac caagcttggc gtaatcatgg tcatagctgt ttcctgtgtg aaattgntat 720
ccggtcacaa ttcccacaca tacgaacccg gaagcataaa gtgtaaagcc tgggg 775

<210> 134
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 134
acnnttgacc tgatacccag ctggtccgac tcggacccta gtaacggccg ccatgtgctg 60
gaattcgccc ttgagcggcc gccggggcag gtctataagt ctttaaattg ggtcgtgttt 120
ttagcaggta agactaattt atctcttctc cagtgaattg atgctggtgg gattcgattt 180
cacatcacaa cttatattga tagggatttc cttcccaaga gtaataaatt gtttggtttg 240
atataaactt gggggcatat tcaatatcaa ggtacttttt tttttttttt aagttttagt 300
tcagaataac attaattttg agagattgag gtaaagaacc ttaactaatg ctaaggagtt 360
tattttgatt aacataggtt attctgacca ccacctcttc cttccttaat ctccttagaa 420
tctgacagtc tcaaagctgt cacacaaatt agactaattt tgacactttg aaatgaaaac 480
ttcaaggaag aagtagccac ggacagttat gtttataatc agtaggtggc actctttcct 540
caggtagccc cccattttca catgatgtgt ttgaaggtta aatgccccaa aagtgctgag 600
tcagctataa aactaagtcc ctgaattcca tggccctttt aaatatgtaa tcattcaaga 660

ttgaaaaaaa aaattaagca ttttttgntt gnttgcttgg ttggttttga gacngagttt 720
cactcttgnt ggccaggctg gagtgcaatg gcgccatctn actcactgna ag 772

<210> 135
<211> 784
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(784)
<223> n = A,T,C or G

<400> 135
ntgggcctct nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggcccgag gtacttcttt tgaataattc agtattttaa aaatgcaagc 120
caggcacagt ggctcacgcc tgtaatccag cactttggaa ggccgaggtg gggggatcac 180
gaggtcagga gttcaagacc agcctggcca acatggtgaa acctcatctc tactaaaaat 240
acaaaaacta gctgggcatg gtggcgggca cctgtaaccc cagctacttg gagggctgaa 300
ggagaattgc ttgaatccgg gaggcagagg ttgcagtgag ctgagatggc gccattgcac 360
tccagcctgg ccaacaagag tgaaactccg tctcaaaaac aaacaagcaa acaaacaaaa 420
aatgcttaat tttttttttc aatcttgaat gattacatat ttaaaagggc catggaattc 480
agggacttag ttttatagct gactcagcac ttttggtggc atttaacctt caaacacatc 540
atgtgaaaat ggggggctac ctgaggaaag agtgccacct actgattata aacataactg 600
tccgtggcta cttcttcctt gaagttttca tttcaaagtg tcaaaattag tctaatttgt 660
gtgacagctt tgagactgtc agattctaag gagattaaag gaanggaaga ggtggtggtc 720
agaataacct atgttaatca aaaataaact tccttagcat taagttaang gtctttacct 780
caan 784

<210> 136
<211> 768
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(768)
<223> n = A,T,C or G

<400> 136
acnttgantg nacccacttg tccgactcgg atccctagta acggcgcagt gtgctggaat 60
tcgccctttg agcggccgcc gggcaggtac tttttttttt ctttttttac atctgatttt 120
aatgcttcgt taacttcaaa agggaactgg gtagagttca gaaggtgagc tgttgttttt 180
ctaaacctct tcccaggaag gagacattga cacttgaatt tttgccacct ttttcctcat 240
tagaaggaaa gtagaaagcc ttactgtagg atttttaaaa aaaaatccat ctcaccccat 300
attggtctta aataagtata gactaattaa cctaagctac ctttaacaac gtagaattta 360
gatgggttca tatatgtgag aaaaacctga atataggaca ggggtcctac tttttttcccc 420
acctctgccg cccaggctag agtatagtgg tgtgatcttg gcccactgca acctctgctt 480
cctaggttca agtgattctc ctgcctcagc ctcccaagta gctgggattg taagagtatg 540
ccaccacgcc cagctacttt ttgtattttt agtagagaca gggtttcatc atgttggcca 600
ggatggtctc ttaactcctg ccctcaagtg atccaccaga gaggagatcc tcggccttcc 660
caagtgctgg gattataggc atgagccacc gtacccagcc tactttctaa ttaattaaaa 720
aaaaannnnn nnnnaaaaaa acttnccaaa tgactgataa aaaactgc 768

<210> 137
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)

<223> n = A,T,C or G

<400> 137
ttgggcctct ngagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg taccatgctg acttcttggt atcttttaag gcctaatttt 120
cccttccttg agattactgt agtgtgttcc agctaatttc tatttggaaa cgagttggaa 180
cagctgaaaa ctaggtatta ttgaaggcaa agtagcctca cgtcagtttt ttatcagctc 240
atttgggaag tttttttttt tttttttttt ttttttaatt aattagaaag taggctgggt 300
acggtggctc atgcctataa tcccagcact tggggaggcc gaggatctcc tctctggtgg 360
atcacttgag ggcaggagtt aagagaccat cctggccaac atgatgaaac cctgtctcta 420
ctaaaaatac aaaaagtagc tgggcgtggt ggcatactct tacaatccca gctacttggg 480
aggctgaggc aggagaatca cttgaaccta ggaagcagag gttgcagtgg gccaagatca 540
caccactata ctctagcctg ggcggcagag gtggggaaaa aagtaggacc cctgtcctat 600
attcaggttt ttctcacata tatgaaccca tctaaattct acgttgttaa aggtagctta 660
ngttaattag tctatactta tttaagacca atatggggtg agatggattt ttttttaaaa 720
atcctacant aaggctttct actttccttc taatgaggaa aaaagtggca aaaattt 777

<210> 138
<211> 950
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(950)
<223> n = A,T,C or G

<400> 138
nnnnnnnnnn nnnnnnnnnn nttnnnnnnn nnnnnaaanc cnnnnnttna nnngnnaaac 60
cccattggna aanttaaccn ncccccaaaa gcccttttngg ggtttaaccc ccgaaagcct 120
tccgggggna atcccccaact ttaagttaaa acnggggccc cgggcccaag ttggttggcc 180
tttgggggaa aatttccgcc ccctttccga agccgggccc ggccccgggg gccaagggta 240
ccatgggaat ggttaccttt tggcaagaac tggtcaaacc ctggaaattt tggtattttt 300
gctttggaca ttggccctaa attaattaag tttcaaggtg gtcaggcttt acccactttt 360
tggtctggca acatgcagaa gagacagtgc ccttttttagt gtatcatatc aggaatcatc 420
tcacattggt ttgtgccatt actggtgcag tgactttcag ccacttgggt aaggtggagt 480
tggccatatg tctccactgc aaaattgctg attttccttt tgtaattaat aagtgtgtgt 540
gaagattctt tgagatgagg tatatatctc actcttcatc aaactataag ttttttttaag 600
taaaagaaaa tttattatga aactaaagga ataaaagaat gaccactcca taggcagaga 660
aacgtcactt taaggttttg acgtcaattg atttttgtcc aaatcaataa ttactgcaat 720
gattgaaaaa tgattattac taagtttgtt ttcattgtct caaggtctgc tgaactctgg 780
atccaggctg tgtcaacagg gtagtgtggt gcctcctgta cctcggccgc gaccacgcta 840
agggcgaatt ctgcagatat ccatcacact ggcggccgtt cgagcatgca tctagagggc 900
ccaattcgcc tatagtgagt cgtattacaa ttcactggcc cgcgttttag 950

<210> 139
<211> 779
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 139
ttgggcccnt agagctgctc gagcggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg tacaggaggc accacactac cctgttgaca cagcctggat 120
ccagagttca gcagaccttg agacaatgaa aacaaactta gtaataatca tttttcaatc 180
attgcagtaa ttattgattt ggacaaaaat caattgacgt caaaacctta aagtgacgtt 240
tctctgccta tggagtggtc attcttttat tcctttagtt tcataataaa ttttctttta 300
cttaaaaaaa cttatagttt gatgaagagt gagatatata cctcatctca aagaatcttc 360

acacacactt attaattaca aaaggaaaat cagcaatttt gcagtggaga catatggcca 420
actccacctt acccaagtgg ctgaaagtca ctgcaccagt aatggcacaa accaatgtga 480
gatgattcct gatatgatac actaaaaagg gcactgtctc ttctgcatgt tgcagacaaa 540
aagtgggtaa gctgacactg aaactaataa ttaggcaatg tcaagcaaat acaaattcag 600
gttgacagtc tgcaaagtaa catccatgta cctgcccggg cngnccgctc gaagggcgaa 660
ttccagcaca ctggcggccg ttactagtgg atccgagctc ggtaccaagc ttggcgtaat 720
catgggcata gctggttcct gtgtgaaatt ggtatncgct cacaattncc acaacatag 779

<210> 140
<211> 779
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(779)
<223> n = A,T,C or G

<400> 140
gcccntagag catgctcgac ggccgccagt gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac caggtgggct gacgcacatc ccctaaacat tctggatctc 120
ttactcatcg tgaaaggcag acgctctaag tctaaagtct agggtaggag tttccattct 180
ttggaaaacc aaagatggtt actcttctta atgaaactga gaagaaggta tctacagaaa 240
acactgaatt taaacaaatt atgaccttgt ttgttgaagc catcaaggac ccaagatata 300
tcaaagaaca acatctctgt attggcctac aggttcagag tgttttgagg tctgtttaag 360
cactaatagg attttaggcc agcatccagt cagaagagat agttcacaga ctcagagttg 420
gaaacagatt aaaaaaaaaa agatgtcaac atagaaaatg atgatagagt ttagttaaaa 480
aaattcacac ataaaattac agttaaaaaa attcacacat aaaatagagt gtttgcatag 540
caagacatta ttgcccttca gcctggcaga aaaacataaa ctcaggtgta tattttataa 600
taaacattgt attgaatgct aagaatgata cactgttgaa catctcctga atggtttgcc 660
ttcttgtaaa tcataccaat tgtttagaca attgaaattc caagctcttt ctcttctccc 720
atataaaaac caacagaaac anggaggctg ttagtagcaa gctcctcatg ggaaanggt 779

<210> 141
<211> 986
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(986)
<223> n = A,T,C or G

<400> 141
aanccnnnnn ntttatttgg gnaaacccaa ttgggnaaaa ttnaacccgn ccccccnaaa 60
ngccccttttn gggggttnaa ccccccggaa aacccttccc ggggggaaat tccccaacct 120
ttaaagnttt aaaaacccgg gggccccggg cccccaaagt ttgggttggc cnttggggga 180
aaaatttttt ccgggccccc cnttttaaag cccggttggg gtttccggcc ngggggcccc 240
gggaaagggt tnacccttt tttttaact tttttnnntt tcctttttttn nttccttttt 300
tttcttttt tttttctttg gtntnnnttt tttttcaat tttttggttt ttggtttttg 360
gttatggttt ttttagaaca ggggtcccac tctgtcaccc aggctggagt gcagtggtgc 420
aatcacaggt cactgaaacc tcccacctag ctgggactag aggtgcaggc caccacacca 480
gctaatttat gtaattttttg tagagacgag tttcaccacg ttacctaggc ttgtcttgaa 540
cacctgggct caagcaatct tccagcccca gcctcccaaa gtgctgggat tacaggtata 600
aaccacaatg cccccgtttt tactctttac tgcatccttc ccatcagtat taattcctca 660
gaaatttagt acccctgtgc ttcattcagt atcagtaacc ctgcaatgat ttttacaaat 720
atcttttttct agtgggtttt ttacttagag gaaagaactt tgtaatagct cttaatgttt 780
atatataaga gaagacagaa tggaaaatgt tttttgaagt caaatattgc atgatgtaaa 840
gaaaaaactt taaacttaaa tgagtanggt tgtcctgaat tacactggta actctctact 900
tctttattaa agaagttata gtaagatgcc tttggntacc tgatttcagt gtacctgccc 960
gggccggccg ntcaaaaggg cgaant 986

<210> 142
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 142
gggcccgtan agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gcccgggcag gtacactgaa atcaggtaac aaaggcatct tactataact 120
tctttaataa agaagtagag agttaccagt gtaattcagg acaacctact catttaagtt 180
taaagttttt tctttacatc atgcaatatt tgacttcaaa aaacattttc cattctgtct 240
tctcttatat ataaacatta agagctatta caaagttctt tcctctaagt aaaaaaccca 300
ctagaaaaag atatttgtaa aaatcattgc agggttactg atactgaatg aagcacaggg 360
gtactaaatt tctgaggaat taatactgat gggaaggatg cagtaaagag taaaaacggg 420
ggcattgtgg tttatacctg taatcccagc actttgggag gctggggctg gaagattgct 480
tgagcccagg tgttcaagac aagcctaggt aacgtggtga aactcgtctc tacaaaaatt 540
cataaattag ctggtgtggt ggcctgcacc tctagtccca gctaggtggg aggtttcagt 600
gacctgtgat tgcaccactg cactccagcc tgggtgacag agtgggaccc tgtctaaaaa 660
aaacataaca naacanaacn naatgaaaaa aaaaacaaga aaaaagaata gaaaaagaaa 720
aaagtnaaaa gtncctcggn cgcgaccacg ctaagggcga attccagcac actgcggccn 780

<210> 143
<211> 794
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(794)
<223> n = A,T,C or G

<400> 143
nnnnnnnnnn nnnacnnttg actgataccc aacttggtac cgactcggac cactagtaac 60
ggccgccagt gtgctggaat tcgccctttc gagcggccgc ccgggcaggt acagaaagaa 120
gagccaggat attctttgtt ttcctaagcg tagctgtgag caacattatc tctcctactg 180
gcttctttga ggtatgagag tcatcattac atctgtgtgc tttgtcaagt tatatgtcac 240
aattccacct gtgggtagag aacaagcaca agagtcacat caactgtgtg ctgggccagg 300
gttatgtcac aatcttccct gagagcatgc accaggcaga agagtcacat cacagggttc 360
tcaaccagag atgttacaat cctctcctga aagcaggaca caggaaaaag agtaagatca 420
cctgcatgct gggctcagat atatgtcaca agactcactg tgggcaaagt ccagaaggac 480
agacagaaca gctggttgct tgacccagca atatgtcaca atcttctcta tgggcagaat 540
gcaggcagaa gtagagggct tcatcttcca ggtgatggat taaaaaaata catcccaagg 600
ctctctgtgg gaaagggctc angcagaaac tttccaaccc ctangtgttt gcttcagtga 660
tatgtcacaa ttaaccaaaa tatgcaggtt tcaagcaagt gagtnaagtc atatcaccta 720
nggtgcttgg tccanaaatc tgncacaatc tttttttttt ttttggcatg cccagcngaa 780
ttgaaaagtc ncan 794

<210> 144
<211> 782
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(782)
<223> n = A,T,C or G

<400> 144

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cnanngggcc cntagagcat gctcgacggc cgccagtgtg atggatatct gcagaattcg      60
cccttagcgt ggtcgcggcc gaggtacaat cttggctcac tgcaacctcc acctcccggg     120
ttcaagcaat tctcctggct cagcctcctg agtgctggga ctacaggcat gcaccaccac     180
tcccacctaa ttttgtattt ttgatagaga cggggcttct ccatgttggt caggctgttc     240
tcaaactcct gacctcaggt gatttgactg tcttagcctc ccacagtgct gagcttatag     300
gcaggtgcca cgacacctgg ctggaatcat ttatttcaac atatctctgg gtccaacaac     360
atggtgatgc aactttcctg catgggccct cccacagaaa tactctaata catcttttca     420
ttcattatct tggtgatgtg acttttctat tctgcttggg cactgccaaa aaaaaaaaaa     480
aagattgtga cagatttctg gaccaagcac ctaggtgata tgactttact cacttgcctg     540
aaacctgcat atttggtta ttgtgacata tcactgaagc aaacacctag gggttggaaa      600
gtttctgcct gagcccttcc acagagagcc ttgggatgta tttttttaat ccatcacctg     660
ggagatgaaa ccctctactt ttgcctgcat tctgcccata gagaagattg tgacatattg     720
ctgggtcaag caacccagct ggtctgctgt ccttntggac tttgcccaca agtgagtttt     780
gn                                                                    782
```

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<210> 145
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 145
annnttgacc tgatacccag cttggtaccg agctcggatc cactagtaac ggccgccagt      60
gtgctggaat tcgccctttc gagcggccgc ccgggcaggt actttttttta cttttttttt    120
cttttttttt ttggacatct gttttcactc ttaggctttt aaacaatagt tattgctttt     180
atccctctca gattctaata actgagagcg atggggctat attgaatctc tgtatgcact     240
gagaactgag ctatgaagag gatcttatta aactgctggt ctgactttat ggattgacac     300
tgttcctttc ttttattgtg aaaaaaaaaa aaaaccctga aagtcttggg aaccccctaa     360
agtcttttgg gaatcctcaa aaagcatggg aagttaagta tttagctaca taaatgttgt     420
aagatcatat cttatgtata gaagtaataa gaccatttgg aattactgga ctaattgaat     480
agttaagggt tctattcggg acaataaaat gtattttgaa agtgctgcta actattgatg     540
ctgacagtgt ttcactccta tgagtgaccc aaacatatta taaatatgtg gtaaagggaa     600
tggagcctgt ggggttgagc agaatgttgg actttttttt tnnnnnnnnn nttttttngc     660
ttnctattng atngataacg atttcnggat tncctttaaa nncncngang gtttggaaac     720
tttggactgg attctggttc ccngaaacag gttcactggg nnccgggggga cacttttaan    780

<210> 146
<211> 778
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(778)
<223> n = A,T,C or G

<400> 146
ttgggcccnt agagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct      60
tagcgtggtc gcggccgagg tacatggagg cctggactgt aaagagacta cggaaggggc     120
agcatgtgtg ttttgcttct cagattcatt gtcactcacg ttgcataaag tcctcagttg     180
tttttaagta attgttttac tatggatata ttaaacatac agaataaaaa agggaataaa     240
catacaattt ggcaaacccc ctactgagcc tttaaaaata ttagaaggtt ggtattaaac     300
caggtaactt acggatttgg aaaaaaaaaa aaaaagaaag cattgaatat ggctgggcgg     360
ttctctgggg atccttgggc agacccagtt tgccccgatt tctcactgta gttttcaaga     420
ataactgtag gaggcggtgg gagtgcagca tcctgagata agggagacga gccagaacag     480
cgcgggcact gttccagccc ccctagaaat gggttgatct tcagtgcttc agctcagtgt     540
gtcatgcttc acccacgatg taaaagccta ggatcggagg cttccccagg gttcgtcagc     600
tgtggcacaa tagggcccgt tgcaaataag attctattcc tgtcagacag tttcgtgagt     660
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ttgtgggggа acactcaccc tagcttctgn tgnctcttca tgcctgtgtg ttcctaatca 720
acttttttgn gtaacttggt gttttgaaag tgtcaccagc acacaatgga acctgtcn 778

<210> 147
<211> 784
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(784)
<223> n = A,T,C or G

<400> 147
acnntatgac ctgattacgc caacttggta ccgactcgga ccactagtaa cggccgccag 60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg tacttttttt tttttttttt 120
tttttttttg ggattgaatc aacatgcttt aataggaaaa gatgtatggg ctatatatgn 180
atcaatctgg ngaancctcg ntctaataaa gggtcttttt cttttctatg atacacacag 240
ncacgctgat aatatgcnaa tgaacatttt cctttatgnc tctncanata atggttattg 300
gctgaggnaa attaaattcc caccanggnt tgctgncagt attttaacac ccacattagt 360
atatgcntnc agggtcataa ccccctaaaa tccatnatgc aaccttatta atctggcttg 420
ggantccngg ttaatgcttg gatttanttc ctgattacac tncntngaaa agtgagacat 480
ttgncattcc caactttggg aaaaccaact tatattcaac cntntnaatg aaggccatct 540
tgatggnctc aacactaatt tttatgatgc aaatttatac acngattttt gtaaagggca 600
aagttttaaa agcgtattta acttgatggt ttctatcagc attaatnaaa tggncatgaa 660
taggcattaa aaacagttgc cagtgatnat ctgcatgaaa ggaaaaagaa ccctgcaaat 720
ggctattgaa nttggaaata ttggntttga natgtaagaa aatntttaga aagctcncnc 780
tgng 784

<210> 148
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)
<223> n = A,T,C or G

<400> 148
gggcccntan agcatgctcg acggccgcca gtgtgatgga tatctgcaga attcgccctt 60
agcgtggtcg cggccgaggt acaaagcact gtttaaaacc agtccaagat acttaatcca 120
aactgtatca tgattcttca ttagaaatct agacaccact catggtggtt tcttacactt 180
taaaaagttg aggcattttc agtgtgagca ttctgaatat ctcttacata tcaaaaacaa 240
tacttccaac tcaatagcca tttgcagggt tctttttcct tcatgcagat tatcactggc 300
aactgttttt aatgactatt catgaccatt ttatttatgc tgatagaaaa catcaagtta 360
aatacgcttt taaaactttg tcctttacaa aaatcagtgt ataaatttgc atcataaaaa 420
ttagtgttga gaccatcaag atggccttca tttatatggt tgtatattag ttggttttcc 480
cagagttggg aatggcagat gtctcacttt tctatgtagt gtaatcagga aataaatcca 540
agcactaaac aggaatccca agacagatta ataaggttgc atgatggatt ttagggggtt 600
atgaccctgg acgcatatac taatgtgggt gttaaaatac tgacagcaag ccctggtggg 660
aattaattta cctcagacaa taaacattat ctggagagac ataaaggaaa atgttcattt 720
gcatattatc agcgtggctg ggtgtatcat agaaaaagaa aaagaacctt tttan 775

<210> 149
<211> 783
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(783)

<223> n = A,T,C or G

<400> 149
acnntatgac ctgatacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacccgatta aaccagagca 120
aaaactacct tctgcaggtc agggagctaa tgacatggca ttggccaaac gttcccgcag 180
tcgaactgct acagaatgtg acgttcgtat gagcaagtct aagtcagaca atcagatcag 240
tgacagagct gctttggagg ccaaagtgaa ggatcttctc acgctggcaa aaaccaaaga 300
cgtagaaatt ttacatttga gaaatgaact gcgagacatg cgtgcccagc tgggcattaa 360
tgaggatcat tctgagggtg atgaaaaatc tgagaaggaa actattatgg ctcaccagcc 420
gactgatgtg gagtccactt tattgcagtt gcaggaacag aatactgcca tccgtgaaga 480
actcaaccag ctgaaaaatg aaaacagaat gttaaaggac aggttgaatg cattgggctt 540
ttccctagag cagaggttag acaattctga aaaactgttt ggctatcagt ccctgagccc 600
agaaatcacc cctggtaacc agagcgatgg aggaggaact ctgacttctt cagtggaang 660
ctctgcccct ggctcantgg gaggatctct tgagtcagga tgaaaataca ctaatggacc 720
attagcacag tacttcatgg caatttagac agtgagtgca atgaggtcta ccagcccctt 780
ann 783

<210> 150
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 150
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cgagcggccg cccgggcagg tactgtgttg gttctcttcc atctggtgta tccgttcagt 120
caggcaagcc acggacactt cactggcatt cccgctgctc cccttccggg agcgctctat 180
gctggggatg ccttccgact ctgaggagga tggtgcatcc agcgcatcat cgctcgatgt 240
gaggggctgg tagacctcac tgcactcact gtctaaattg tccatggagt tactgtgctg 300
atggtccatt agtgtatttt catcctgact caagagatcc tccactgagc caggggcaga 360
gccttccact gaagaagtca gagttcctcc tccatcgctc tggttaccag ggtgatttc 420
tgggctcagg gactgatagc caaacagttt ttcagaattg tctaacctct gctctaggga 480
aaagcccaat gcattcaacc tgtcctttaa cattctgttt tcatttttca gctggttgag 540
ttcttcacgg atggcagtat tctgttcctg caactgcaat aaagtggact ccacatcaag 600
tcggctggtg agccataata gtttccttct cagatttttc atcaccctca gaatgatcct 660
cattaatgcc cagctgggca cgcatgtctc gcagttcatt tctcaaatgt aaaatttcta 720
cgtctttggt ttttggcagc gtgagaagat ccttncttgg nctcnaagcn g 771

<210> 151
<211> 778
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(778)
<223> n = A,T,C or G

<400> 151
acnntatgac ctgatacgcc agcttggtac cgactcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgcccttt gagcggccgc ccgggcaggt actttttttt ttcttttttt 120
acatctgatt ttaatgcttc gttaacttca aaaggaactg gtagagttca gaaggtgagc 180
tgttgttttt ctaaacctct tcccaggaag gagacattga cacttgaatt tttgccacct 240
ttttcctcat tagaaggaaa gtagaaagcc ttactgtagg atttttaaaa aaaaatccat 300
ctcaccccat attggtctta aataagtata gactaattaa cctaagctac ctttaacaac 360
gtagaattta gatgggttca tatatgtgag aaaaacctga atataggaca ggggtcctac 420
tttttttcccc acctctgccg cccaggctag agtatagtgg tgtgatcttg gcccactgca 480

```
acctctgctt cctaggttca agtgattctc ctgcctcagc ctcccaagta gctgggattg     540
taagagtatg ccaccacgcc cagctacttt ttgtattttt agtagagaca gggtttcatc     600
atgttggcca ggatggtctc ttaactcctg ccctcaaagt gatccaccag agaggagatc     660
ctcggcctnc ccaagtgctg ggattatagg catgagccac cgtacccagc ctactttcta     720
attaattaaa aaaaaannnn nnnnaaaaaa aacttnccaa atgagctgat aaaaacng       778
```

<210> 152
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 152

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cgtggtcgcg gccgaggtac catgctgact tcttggtatc ttttaaggcc taattttccc     120
ttccttgaga ttactgtagt gtgttccagc taatttctat ttggaaacga gttggaacag     180
ctgaaaacta ggtattattg aaggcaaagt agcctcacgt cagtttttta tcagctcatt     240
tgggaagttt tttttttttt tttttttttt tttaattaat tagaaagtag gctgggtacg     300
gtggctcatg cctataatcc cagcacttgg ggaggccgag gatctcctct ctggtggatc     360
acttgagggc aggagttaag agaccatcct ggccaacatg atgaaaccct gtctctacta     420
aaaatacaaa aagtagctgg gcgtggtggc atactcttac aatcccagct acttgggagg     480
ctgaggcagg agaatcactt gaacctagga agcagaggtt gcagtgggcc aagatcacac     540
cactatactc tagcctgggc ggcagaggtg gggaaaaaag taggacccct gtcctatatt     600
caggtttttc tcacatatat gaacccatct aaattctacg ttgttaaagg tagcttaagt     660
taattagtct atacttattt aagaccaata tggggtgaga tggatttttt tttaaaaaat     720
cctacagtaa ggntttctac tttccttcta atgaggaaaa angnggcaaa at             772
```

<210> 153
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 153

```
acnntatgac ntgaatacgn ccaagcttgg taccgagctc ggatccacta gtaacggccg      60
ccagtgtgct ggaattcgcc cttagcgtgg tcgcggccga ggtacttttt tttttttttt     120
tttttttttt tttagttaaa gaatgcttta ttaatacaaa tacacacaaa ctctgaagca     180
ctaagaaatt taaatatcta tgtcacagca aacaggtggc aattcaacat ccagggtcga     240
cagaatgctt gaaggagact gcaacagatt ggattcccat ggtggagagg gcatnttcac     300
aggtgaaggg gggcccagct gaaacagctt ttcaagctct ctctcctcgt caaggatcat     360
gagaggcact ccactcaagg ggaggtgcgc aatctggtgc tcttcaggca ggtcaaaact     420
ctcaaagtct agaggattga agggaaagaa tttttctatt tctggatagg catcatctga     480
ggcaggaaca gagcttttgg ctttaacagt cttctcagtc atctttttgg cagaaaagct     540
tggctgtttt tgtttgaggg gtcccttggt ctttacagac ttttctgtag ctctgttgac     600
agttcccaaa gcctttctag tagctttagg taaggctggt ggggcatcga acgttttgcc     660
aaaacgtggt gttgaaactt gagatctccc atctaangct ttgattgaan gtccagaccc     720
cagcttcagc ccatccttag caaccacacn ggtgcctggg tctncatttt ccttatnang     780
```

<210> 154
<211> 770
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(770)
<223> n = A,T,C or G

<400> 154
gncctgtnna gctgctcgag cggccgccat gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt acgcggggac cgcggcctca gatgaatgcg gctgttaaga 120
cctgcaataa tccagaatgg ctactctgat ctatgttgat aaggaaaatg gagaaccagg 180
caccсgtgtg gttgctaagg atgggctgaa gctggggtct ggaccttcaa tcaaagcctt 240
agatgggaga tctcaagttt caacaccacg ttttggcaaa acgttcgatg ccccaccagc 300
cttacctaaa gctactagaa aggctttggg aactgtcaac agagctacag aaaagtctgt 360
aaagaccaag ggacccctca aacaaaaaca gccaagcttt tctgccaaaa agatgactga 420
gaagactgtt aaagcaaaaa gctctgttcc tgcctcagat gatgcctatc cagaaataga 480
aaaattcttt cccttcaatc ctctagactt tgagagtttt gacctgcctg aagagcacca 540
gattgcgcac ctccccttga gtggagtgcc tctcatgatc cttgacgagg agagagagct 600
tgaaaagctg tttcagctgg gcccccсttc acctgtgaag atgccctctt caccatggga 660
atccaatctg gtgcagtctc ttcaagcatt ctgtcgaccc tggatgttga attgccacct 720
gtttgctgtg acatagatat ttaaatttct tagtgcttca gagtttgngg 770

<210> 155
<211> 767
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(767)
<223> n = A,T,C or G

<400> 155
acattatgac tgatacgcca gcttggtacc gactcggatc cactagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac gcgggcccgc tggataactg 120
ccctgggaca cagcagcggg aagccgcctg cagactgaac ctcactgacc caggtggaaa 180
tcgttaggtc atttactgct aagcagccag atgaactctc cctgcaggtg gctgacgtcg 240
tcctcatcta tcaacgtgtc agcgatggct ggtatgaggg ggaacgacta cgagatggag 300
aaagaggctg gtttcctatg gaatgtgcca aggagataac atgtcaagct acaattgata 360
agaatgtgga gagaatggga cgcttgctag gactggagac caacgtgtag tctctcagat 420
ggtcttttgt tactgcaaga tttgcacgac acttaccggg ctggttggtt ctgggctagt 480
tttattgnta attttgtcac agcctattta attaaaagaa cgaaaacact tgcctttaag 540
cttgccaggt tgttctgctc tctcatgaga agagcttgga tacagtgagt ttgcacagct 600
cagtttttac ctaaccacac acttgcagac ctnctgaggt acctgcccgg gcggccgctc 660
gaaanggcga attctgcaga tatccatcac acttggcggn cgctcgaaca tgcatctaga 720
nggcccaatt cgncctatag tgagtcgtat tacaattcac tggncgc 767

<210> 156
<211> 827
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(827)
<223> n = A,T,C or G

<400> 156
attgggcccc tagatgcatg ctcgacggcc gccagtgtga tggatatctg cagaattcgc 60
cctttcgagc ggccgcccgg gcaggtacct caggaggtct gcaagtgtgt ggttaggtaa 120
aaactgagct gtgcaaactc actgtatcca agctcttctc atgagagagc agaacaacct 180
ggcaagctta aaggcaagtg ttttcgttct tttaattaaa taggctgtga caaaattaac 240
aataaaacta gcccagaacc aaccagcccg gtaagtgtcg tgcaaatctt gcagtaacaa 300
aagaccatct gagagactac acgttggtct ccagtcctag caagcgtccc attctctcca 360
cattcttatc aattgtagct tgacatgtta tctccttggc acattccata ggaaaccagc 420

```
ctctttctcc atctcgtagt cgttcccccct cataccagcc attggctgac acnttgattg      480
gatgaaggcc ancttanncc nactngcagg gagaagtcaa tttgnttgnt taaccnntna      540
atgganccтt accnanttnc acctggggtc aagtgagggt tcaagtctgc angcggcttc      600
ccgctgctgt ggtcccaagg gcaagttatn cagcggggcc cgcgttacct tgggccgggg      660
accaacgcct taangggccg aaatttccaa gcacacttgg ccggcccgtt acctagtggg      720
atnccgaact tcgggtaccc aaagccttgg gcgttaatca atgggtcaat aggcttggtt      780
tcctggtgtg naaaattggt aatccggttc acaanttccc cacaaca                    827
```

<210> 157
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 157

```
aacactatga cctgatacgc canсttggta ccgnctcgga tccctagtaa cggccgccag       60
tgtgctggaa ttcgcccttt cgagcggccg ccgggcaggt acataatctg gaaatttatg      120
ttacaggtat gcatatttgt atatgaaaaa tattaactga gaaattactg agcttcttag      180
caaaaaatat aattatttca gagatatgat acagtttaat atctgccttc ctcaaaaagt      240
cagaaaataa aaagttttaa attgcatata ttttcatttc ttacatatgt cagaacactc      300
agaattttta ataaaatgtt ttaaaacata attataagtt gttactttta tttctatggt      360
tagtggaacc cacagggtcc tgtatctgat taaatggagg atatattagg agaatttttt      420
agaagaatga cacatgtgac ataccaccat atttgcaaga aaatataact tgatagtaga      480
gtaagttagc tgctttatat gatgaattaa aggcactagc tcttagaaaa aaaaggatta      540
aaatgctgac ttcagtaata atgtaaggag ctctgctctt taacatttcc taattaggta      600
taaactatga tggaagggaa aggtggaatg gaagtntcta cntnttacca ttggctttcn      660
ttcatgaaat tggcagnnag cctnccattt cnnnaggnct ttaatnaaaa antttttccc      720
aacttttnct tttcnaaaaa nttntttnncc nnatngnnaa ctggnggtna aaacccggct      780
tttttggggg gaaancctac ctggntnggg naaaaant                              818
```

<210> 158
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 158

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ntgggcccnt nnagcatgct cgacggccgc cagtgtgatg gatatctgca gaattcgccc       60
ttagcgtggt cgcggccgag gtacttcaac cacccctcct acaaaactct atacccttgt      120
catattaaaa ttgtatgtta tgccaggctt ccctaataca acaaaatctc tgaataaaac      180
ctattaaata tacaatttct atcaacatgc ctgccacaca tgcttaataa ttgcttagtg      240
aatacaagat taatgcatga gtgcctaagt tacttcatct agtataacaa atgacaatat      300
ctcatttgtt tcccgaagta tccttattcc attcaagctc tgaagaaagt attaatgata      360
ttcgtcctta agtaattttt tctgcattca aatctcacca ttcaaatgat tttccaacag      420
tagtttcccc aaaagcagtt tacacagtta catttgttat aatttttgaa agaaaagttg      480
ggaaaatttt attaagactc tgaatgtagc ttactgccaa ttcatgaaga aagcaatgta      540
atacgtagat acttcattcc acctttccct tcatcatagt ttataactaa ttaggaaatg      600
ttaaagagca gagctcctta cattattact gaagtcagca tttatacttt tttttctaag      660
agctagtgcc tttaattcat catataaagc agctaactta ctctactatc aagttatatt      720
ttcttgcaaa tatggtggta tgtcacatgt gtcattcttc taaaaaattc tg              772
```

<210> 159
<211> 1024
<212> DNA

<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(1024)
<223> n = A,T,C or G

<400> 159
ttgggnaaaa ttttaaaccg gcccccccaa angnccсttt ttgggggntt aaacccccсg 60
gnaangcccc tttccggggg gggaaattcc ccccaaccct ttaaaggttt aaaaacccgg 120
gggccnccgg gcccccсaaa ggtttgggtt tgggcccttt gggggaaaa aattttttcc 180
gggcccccсc ntttttaaag gccgggttgg ggggtttccc gggcccgggg gcccccсgga 240
aaaggggttt aaccccсttn aattttttn gggtttttcc cccccaaatn gggtttccaa 300
ttttttttt tttaaaaaac ccaaaanggg aaaaaaaggg gttggcccaa aatttaaggg 360
cctttctttc aaaagggttt cctttgggaa aaaaaaacct tgggttgggg gaaaaggttt 420
ncccaaaaat ttaaacctgg gaaaaccttc tttgggnaac ccactttaaa aatttaaant 480
taaanttaaa tttaaattta aanttaagga atgggnttgg aaaaaaaaag gaatattccn 540
ttaatttggc cttaattttt taatttgntn atttgactgg tnatgnnttt acttttnaaa 600
aacntnctnn ccaaaaacca attttacntg gncnngtggg atttaccntn ttcnattacc 660
ngggagttaa cccaactnga acntttngga gggnccagtc ctccataggg acctccntca 720
nttntgatnc caactgcaag ttcagggaaa ttctcacatc cccсttgggc natatatctc 780
tttaaaagcn cctcacagca ctcactgaan tctattatat tatagatang gtntattatg 840
ggaaangggt nacanntcaa natnncccaa cgcggggana cacanngngc agngcccgat 900
gatnttccna nacacagant ttggtgttct ctggagncgt ttccccсnta gnaaaatgtt 960
gacacntgga cagagttttt acccccaggg gaacgtnaat caatctttgg aagtttcaaa 1020
tcag 1024

<210> 160
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 160
gggcctctnn agcatgctcg agcggccgcc agtgtgatgg atatctgcag aattcgccct 60
ttcgagcggc cgcccgggca ggtactgtaa gttattttct tccttatctc ccaatgacac 120
tgttttctac atgaaaaata ccattttggc tttatcaaca tgttattaat tcataatatg 180
agagatctat cagcactatt tgtaaaaata ttcaattaaa aaaattaaga tgatttatag 240
ttgtgtggta aagaatttga ccttacccaa aggaggtcag gcttttgccc tcagccttaa 300
ggagataatc ttgtcatacc caataaaagt gttattttaa agtgaggctg actacacctg 360
ataatccagc ttgagggaca gttatgccag tttgaccaac tagatgattt agggagcttt 420
ctctcccaac ttcaaagctg tgatgaatca aacaggtaat taatcgatca tgcttatgta 480
atgaagcctt gattgaaact tcaaagattg attgacgttc cttggttggt aatactctgt 540
catgtgtcaa ttctagaagg gtaatacgtc ctgaggataa cagaagctct gtgtttggaa 600
tcatcctgga ctctgcactt tgnttctcct gctttggctg attttgatct gtaaccttta 660
cctataataa accataacta taatataata gatttcagtg agtgctgtga ngctttctag 720
tgatttattg aacctaaggg tggatgtgag aatttnctga acttgcagtt g 771

<210> 161
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 161
acncttgacc tgatcgccag cttggtaccg actcggaccc tagtaacggc cgccagtgtg 60
ctggaattcg cccttagcgt ggtcgcggcc cgaggtacag aatttattat gaaatagctt 120
aatggcaagt ggtaatttag aagaattaag ttatcagata ggagatatat taaaatattt 180
aaaaattgga tatattcttg aagccctttt acacaagtaa tttctataat ttgattgtaa 240
tgaaagtata atataccttg ttactattat cagattaatt tttgaaagta gaattcctta 300
atcaagccaa ggttatgctg ctttataaga aattaatcag gtagtttaac actagagctc 360
attagccaac ctgtatgtag cacaaaataa tcatctctga taaataccta taaatatatt 420
ttattcatac ttttaaatat tttacaattc aaataaaaac cttatatgta gacaatctgg 480
gctaaatttc catgtatgtt ttgaaaaata atgttagcat gaatagattc atatttaaat 540
atgattttaa atactcttaa tagaggagac ataagaaata tttacataaa agctaagtag 600
catgatacag ctcatggtta ttttcctcat aggaaaacaa ttacttgatt tttttttgca 660
taggattaaa gactgagtat cttttctaca ttcttttaac tttctaangg gcacttctca 720
aaacacagac caggtagtaa atctncactg ntctaaggtc tcaccccact t 771

<210> 162
<211> 768
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(768)
<223> n = A,T,C or G

<400> 162
gggcccctnn agctgctcgn cggccgccag tgtgatggat atctgcagaa ttcgccctta 60
gcggccgccc gggcaggtac tacaaaaaca gaataatttt gaagttttag aataaatgta 120
atatatttac tataattcta aatgtttaaa tgcttttcta aaaatgcaaa actatgatgt 180
ttagttgctt tattttacct ctatgtgatt atttttctta attgttattt tttataatca 240
ttatttttct gaaccattct tctggcctca gaagtaggac tgaattctac tattgctagg 300
tgtgagaaag tggtggtgag aaccttagag cagtggagat ttactacctg gtctgtgttt 360
tgagaagtgc cccttagaaa gttaaaagaa tgtagaaaag atactcagtc ttaatcctat 420
gcaaaaaaaa atcaagtaat tgttttccta tgaggaaaat aaccatgagc tgtatcatgc 480
tacttagctt ttatgtaaat atttcttatg tctcctctat taagagtatt taaaatcata 540
tttaaatatg aatctattca tgctaacatt atttttcaaa acatacatgg aaatttagcc 600
cagattgtct acatataagg tttttatttg aattgtaaaa tatttaaaag tatgaataaa 660
atatatttat aggtatttat cagagatgat tattttgtgc tacatacagg ttgggctaat 720
gagctctagt ggtaaactac ctgataattt cttataaagc agcatacc 768

<210> 163
<211> 776
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(776)
<223> n = A,T,C or G

<400> 163
nantatgacc tgatacgcca acttggtacc gactcggatc cactagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac tcttccgcag agggaaggct 120
gtagaagtct ttgcaagctt catacagaga aatacaaaag gtgtgatgcc attaactggt 180
cctttctaaa gcattaggaa tttagtgaaa ctctcaaaca caaaactgaa aagccatttg 240
aacaaatctc atatacttgt agataagctt ttttttattt aaagcataca aattcaaatc 300
tttcaagcag aaaattcagt caagtgagat ccattggtgg tttgagttca aagtcagtga 360
gcaaatggaa atcattgcgg catctctctc atttccctag tggacattag accactcaaa 420
atgtgtcaca taatttacag ccccttggta gtaattgaat atacacgttg agagtgcact 480
ggcagaacac ttaagaaaga ttgaatgcag gaggaccagc ttacgttatt tttggctcta 540
ctctggtttt tgcttttaat gtttttttctt gagattaatt tcaattgggt tgttccatcc 600
tattcaaaca aatgctttga gagaagagat gaacagcagc atcaaataaa attgtgatat 660

ttagtttnag agacatcang tgttgtaatc aaataagaca gaanggccaa gttaaaatct 720
gtgattngca taaatgaatt taactgttag aatagcanaa ttgagaggtn gattan 776

<210> 164
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 164
cgggcctcta gatgctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcgccg cccgggcagg tacacagtgg ataccacata ctcgctctga ggaagaagga 120
ggaggagaaa gaggagaagg aaggaaattt tcaaatgaca atttctatca ggactcattt 180
tcctattata agttcagaat acttggacgt ctttataaaa tcaagttgaa atctctacta 240
ttttgatctg tattctctta aatattaaag gttataccta gggagattcc atgttgactg 300
gcaaacaaag cataccattt taagaataac tcttcataaa atatgtgtct aagaattaaa 360
agtgtctagt aacagataca caaaagagag atttagaata attaatattt aaagacagat 420
aattttaatg tttcacactt ttaactacaa aattctttgt tttcctaaat attagcaaaa 480
atgttatata ttaaaataaa tcttgaaaat ctcaccctac atttagataa tagttcaaaa 540
gtcatattgc taatctacct ctcaattctg ctattcttac agcttaaatt catttatggc 600
aaatcacaga ttttactttg tccttctgtc ttatttgatt acaacacctg atgtctctga 660
aactaaatat ccaatttatt tgatgctgct gttcatctct tctctcaaag cattngtttg 720
aatangatgg aacaacccaa ttgaaattaa tctcaaggaa aaacattaaa ant 773

<210> 165
<211> 783
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(783)
<223> n = A,T,C or G

<400> 165
tnnnnnacac tatgacctga ttacgccanc ttggtaccga ctcggatcca ctagtaacgg 60
ccgccagtgt gctggaattc gcccttagcg tggtcgcggc cgaggtacag taggaaaata 120
agaataacaa cggcaaaat ctttttagaa catttatgct ttatctgttt tagcttctaa 180
aacaatcctg aaggatgaat aattatcatg agtatagcag aatttaattt tccctgttgc 240
tccaaaattt taatgaaaac tttacggttg agagaaatag gtaaataaaa aaacttccta 300
aaattctaaa gacaattgtt gaataaaatt taagtgaatg agtttgtgct tcatatttaa 360
cttttaactt tccaataggc tttattaaat ggaaaactga aatttacaaa gtcttagagt 420
agaagcattt ttatcctggc tagggattct ctaagagaac cagtagcacc aagatgcact 480
ggaacagtgc aacgagagag ttcatgcctt agggtttaga agcatacaag caaagggaat 540
ggtgcccact tcttactaga aaaatttcac aggctggagt ctgggcggag gagcctggga 600
tgacagtaga agtgtgcagg aagcactaag tctagcctgt acctgcccgg gcggccgctc 660
gaaaggcgaa ttctgcagat atncatcaca ctggccggcc gntcgagcat gcatntagag 720
ggcccaattc gcctatagtg ancgtattac aattcactgg ccgcgtttta caacgtnnng 780
cnn 783

<210> 166
<211> 775
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(775)

<223> n = A,T,C or G

<400> 166
attgggcctc tnnagcatgc tcgagcggcc gccagtgtga tggatatctg cagaattcgc 60
ccttcgagcg gccgcccggg caggtacagg ctagacttag tgcttcctgc acacttctac 120
tgtcatccca ggctcctccg cccagactcc agcctgtgaa atttttctag taagaagtgg 180
gcaccattcc ctttgcttgt atgcttctaa accctaaggc atgaactctc tcgttgcact 240
gttccagtgc atcttggtgc tactggttct cttagagaat ccctagccag gataaaaatg 300
cttctactct aagactttgt aaatttcagt tttccattta ataaagccta ttggaaagtt 360
aaaagttaaa tatgaagcac aaactcattc acttaaattt tattcaacaa ttgtctttag 420
aattttagga agttttttta tttacctatt tctctcaacc gtaaagtttt cattaaaatt 480
ttggagcaac agggaaaatt aaattctgct atactcatga taattattca tccttcagga 540
ttgttttaga agctaaaaca gataaagcat aaatgttcta aaaagatttt gcccgttgtt 600
attcttattt tcctactgna cctcggccgc gaccacgcta agggcgaatt ccagcacact 660
ggcggccgtt actagtggat ccgagctcgg taccaanctt ggcgtaatca tggtcatagc 720
tggttcctgt gtgaaantgt atccgntcac aattcacaca acatacganc cggag 775

<210> 167
<211> 797
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(797)
<223> n = A,T,C or G

<400> 167
ttgnaacnat tntgacctga ttacgccaac ttggtaccga gctcggatcc actagtaacg 60
gccgccagtg tgctggaatt cgcccttagc gtggtcgcgg ccgaggtact ttcagaaggt 120
aaatcagtag atcacccatg tgtatctgca ccttctcaac tgagagaaga accacagttg 180
aaacctgctt ttatcatttt caagatggtt atttgtagaa ggcgaggaac caattatgct 240
tgtattcata agtattactc taaatgtttt gtttttgtaa ttctgactaa gacctttttaa 300
ccatggttag ttgctagtac ccttccttgt ccgaaggagc tgaccagtat tgatgagaga 360
gtccaggcag ctcctgaagt tcagctggta gtttgttctc tgaacatttg gtctcttgaa 420
ggcacagtat atctggggct tcttccttta cccaatctaa tcctttcttc ttaatccagg 480
ctcgaagccc atncacattc caagagcaga tcttgagtgt ggcaggtttg ccactgggtg 540
aggttttctg atctgggggg tcctcataca gggctggggc cctntcctgc tgcctctttg 600
tcattttctt tgcgggccgt cttactcttc ttggcctctg gcttctgtcc tgagctcatc 660
cccgtctttc ggccaccngt tcccctttt tacacgcctt cggcatttcc cgttaccgaa 720
cgcccttttgg gcagctgtac ctgccccngg cggccgttcg aaaaggccna attcttgcag 780
aatttccatc ncaccnn 797

<210> 168
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 168
acantatgac ctgatacgcc aacttggtac cgactcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta ctccggtcgg tgtcagcagc 120
acgcggcatt gaacattgca atgtggagcc caaaccacag aaaatggggt gaaattggcc 180
aactttctat taacttatgt tggcaatttt gccaccaaca gtaagctggc ccttctaata 240
aaagaaaatt gaaaggtttc tcactaaacg gaattaagta gtggagtcaa gagactccca 300
ggcctcagcg tacctgcccg ggcggccgct cgaaagggcg aattctgcag atatccatca 360
cactggcggc cgctcgagca tgcatctaga gggcccaatt cgccctatag tgagtcgtat 420
tacaattcac tggccgtcgt tttacaacgt cgtgactggg aaaaccctgg cgttacccaa 480

cttaatcgcc ttgcagcaca tccccctttc gccagctggc gtaatagcga agaggcccgc 540
accgatcgcc cttcccaaca gttgcgcagc ctgaatggcg aatggacgcg ccctgtaacg 600
gcgcattaag cgcggcgggt gtggtggtta cgcgcagcgt gacccgtaca cttgccagcg 660
ccctancgcc cgctnctttc gctttcttcc ctttctttct tngcacgttc gccggctttt 720
cccgtcaagc tctaaatcgg gggctccttt tanggttccg atttantgct ttacngnacn 780

<210> 169
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 169
gggccnctng agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tacgctgagg cctgggagtc tcttgactcc actacttaat 120
tccgtttagt gagaaacctt tcaattttct tttattagaa gggccagctt actgttggtg 180
gcaaaattgc caacataagt taatagaaag ttggccaatt tcaccccatt ttctgtggtt 240
tgggctccac attgcaatgt tcaatgccgc gtgctgctga caccgaccgg agtacctcgg 300
ccgcgaccac gctaagggcg aattccagca cactggcggc cgttactagt ggatccgagc 360
tcggtaccaa gcttggcgta atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg 420
ctcacaattc cacacaacat acgagccgga agcataaagt gtaaagcctg gggtgcctaa 480
tgagtgagct aactcacatt aattgcgttg cgctcactgc ccgctttcca gtcgggaaac 540
ctgtcgtgcc agctgcatta atgaatcggc caacgcgcgg ggagaggcgg tttgcgtatt 600
gggcgctctt ccgcttnctc gctcactgac tcgctgcgct cggtcgttcn gctgcggcga 660
gcggtatcaa gctactcaaa ggcngtaata ccgntatcca cagaatcagg ggataacgca 720
ggaaagaaca ttgtgagcaa aaggcancaa aagggcagga accgtaaaaa n 771

<210> 170
<211> 777
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(777)
<223> n = A,T,C or G

<400> 170
acacttgacc tgatacgcca acttggtacc gagctcggac cactagtaac ggccgccagt 60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac acagaatagc tgagcagttc 120
acttcaggga tcaggtcatc tctgctcctc ctagtttcac catgttctgg caataaaaaa 180
cacatattat atcctggttt tctctatcct tgcattacta aggtgactgt ctctctttat 240
acatccttgt atggttctcc cagtattagc aagattgtat atctgtaaag aatgtccagt 300
tttgtaaata tttccctgcc tttttttttc ttttttaca tctgatttta atgcttcgtt 360
aacttcaaaa ggaactggta gagttcagaa ggtgagctgt tgtttttcta aacctcttcc 420
caggaagggg acattgacac ttgaattttt gtcacctttt tcctcattag aaggaaagta 480
gaaagcctta ctgtaggatt tttaaaaaaa aatccatctc accccatatt ggtcttaaat 540
aagtatagac taattaacct aagctacctt taacaacgta gaatttagat gggttcatat 600
atgtgagaaa aacctgaata taggacaggg gtcctacttt tttccccacc tctgtcgccc 660
aggctagagt atagtggtgt gatcttggcc cactgnaacc tctgcttcct anggtcaagt 720
gattcttcct gcctcacctt ccaagtagct gggattggaa gaatatgccn ccccccg 777

<210> 171
<211> 782
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(782)
<223> n = A,T,C or G

<400> 171
```
nngggcccnt agagcatgct cgacggccgc cagtgtgatg gatatctgca gaattcgccc    60
tttcgagcgg ccgcccgggc aggtactttt tttttttttt tttttttttt tttaattaat   120
tagaaagtag gctgggcacg gtggctcatg cctataatcc cagcacttgg ggaggccgag   180
gatctcctct ctggtggatc acttgagggc aggagttaag agaccatcct ggccaacatg   240
atgaaaccct gtctctacta aaaatacaaa aagtagctgg gcgtggtggc atactcttac   300
aatcccagct acttgggagg ctgaggcagg agaatcactt gaacctagga agcagaggtt   360
gcagtgggcc aagatcacac cactatactc tagcctgggc gacagaggtg gggaaaaaag   420
taggacccct gtcctatatt caggtttttc tcacatatat gaacccatct aaattctacg   480
ttgttaaagg tagcttaggt taattagtct atacttattt aagaccaata tggggtgaga   540
tggatttttt tttaaaaatc ctacagtaag gctttctact ttccttctaa tgaggaaaaa   600
ggtgacaaaa attcaagtgt caatgtcccc ttcctgggaa gaggtttaga aaaacaacag   660
ctcaccttct gaactctacc agttcctttt tgaaagttaa ccgaagcatt aaaatcagat   720
gttaaaaaag aaaaaaaaaa ggcngggaaa atatttacaa aactgggaca ttctttacag   780
an                                                                  782
```

<210> 172
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 172
```
canttgacct gatacgccaa cttggtaccg actcggacca ctagtaacgg ccgccagtgt    60
gctggaattc gccctttcga gcggccgccc gggcaggtac catcctgtgg ctccttaagg   120
aggcttctct ctttaattct ccatgaggca tccagggtgg tctgggctat gggaagaacc   180
cttcaacttg ggagtagaca ggtgctccaa ttcatagtgc ccattctcag aggccttgtg   240
tgtgagtttc tccttcatgc cttccttctg gctcttcttg tgctccataa tctgctggag   300
ctggtgccca gcatagtctg gcttggtggt cagcgggcca gccggcacag ctacaccaag   360
gacatctgac accatgtagg ggcgcagcca gcccaccaag ggagtgcttc cggggctgta   420
gtgggtctgt ttgtggtaga agagaagtcc atctacctca aaagggaaat ccatagatag   480
cacatcacac aggctttcgg gagtgcaagg gaagttcttt agccccacaa atttaaaagg   540
attaagcttg gttttctctc ccagtccttc ttcttctggt aactttgaat gcatccagta   600
gaatcggaaa tcaagtctgg caatcataaa aagggtgtcc ccgccagcac atcacattca   660
gaacgtagta ggtctggttt acctcattgt aaatgcaatc tagaatggtg taagcttttg   720
ctgntgaagt ttccctgtgc ctctggcaga atgaagaaan ctgttgacac aac          773
```

<210> 173
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 173
```
ntgggcctct nnagctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt    60
agcgtggtcg cggccgaggt acagttcctt ggagcagagt gagcgccgcc ggaggttact   120
ggaactgcag aaatccaagc ggctggatta tgtgaaccat gccagaagac tggctgaaga   180
tgactggaca gggatggaga gtgaggaaga aaaataagaa agatgatgaa gaaatggaca   240
ttgacactgt caagaagtta ccaaaacact atgctaatca attgatgctt tctgagtggt   300
taattgacgt tccttcagat ttggggcagg aatggattgt ggtcgtgtgc cctgttggaa   360
```

aaagagccct tatcgtggcc tccaggggtt ctaccagtgc ctacaccaag agtggctact 420
gtgtcaacag gtttcttca cttctgccag gaggcaacag gcgaaactca acagcaaaag 480
actacaccat tctagattgc atttacaatg aggtaaacca gacctactac gttctggatg 540
tgatgtgctg gcggggacac ccttttatg attgccagac tgatttccga ttctactgga 600
tgcattcaaa gttaccagaa gaagaaggac tgggagagaa aaccaagctt aatcctttta 660
aatttgtggg gctaaagaac ttcccttgca ctcccgaaag cctgtgtgat gtgctatcta 720
tggatttcct tttgaggtag atggacttct cttctaccac aaacagaccc ac 772

<210> 174
<211> 780
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(780)
<223> n = A,T,C or G

<400> 174
acactatgac ctgatacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacaaaaata cattttcca 120
catacaaaag agagaaaaaa acaaagacat gtggcgggtg gcgaggggag gcccaatccc 180
aacaccctac aaggttccat ggaatggaga aggaacaaaa aaatccccaa ttattttggg 240
gtaagatgtg ccccagaaaa ggtgaaatct atgcaataaa acccaggttt tcttcaaatc 300
tagcatctag gatttctatc agagtttcaa ataatcagaa tttctatcag aatttctacc 360
ctgaggtgac acctactaac tgtaggttct ttcattaaaa atgaagacat ctttcaccag 420
aatgtatcaa gctataaaac tggcttcaga gcctacactt agccagagtg gaaaaaaaat 480
agtgcatatt ttcgacagca attttgaatt gatgcttgag gtctcaatcc accagcaccc 540
agatatcatg ttacctccct cagttgaata caagttaaaa tgatgatctt atcgagatct 600
caatagagca cagtgccctt catgtttcgg gtaagaaggt gggaggagga atgaagccgg 660
gtattacacc cagcccaatg acagcttaag ccttaacatg cnggcatctt acaatgacca 720
taaacaaggg angggccaag canggctngc gatcattact ttgcgcacag aatgccatgt 780

<210> 175
<211> 771
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 175
gggcctctag agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt 60
tcgagcggcc gccgggcagg tactaaaaca gctttgctta tgttggccag ggaaaacat 120
ggcattctgt gcgcaaagct aatgatcgcc agccctgcct tggcccctcc cttgtttatg 180
gtcattgtaa gatgcccgca tgttaaggct taagctgtca ctgggctggg tgtaataccc 240
gcttcattcc tcctcccacc ctcttacccg aaacatgaag ggcactgtgc tctattgaga 300
tctcgataag atcatcattt taacttgtat tcaactgagg gaggtaacat gatatctggg 360
tgctggtgga ttgagacctc aagcatcaat tcaaaattgc tgtcgaaaat atgcactatt 420
ttttttccac tctggctaag tgtaggctct gaagccagtt ttatagcttg atacattctg 480
gtgaaagatg tcttcatttt taatgaaaga acctacagtt agtaggtgtc acctcagggt 540
agaaattctg atagaaattc tgattatttg aaactctgat agaaatccta gatgctagat 600
ttgaagaaaa cctgggtttt attgcataga tttcaccttt tctggggcac atcttacccc 660
aaaataattg ggatttttt tgntccttct ccattccatg gaaccttgta gggtgtttgg 720
gattgggcct tccctngcca cccgccacat gtctttggtt ttttctctct t 771

<210> 176
<211> 773
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(773)
<223> n = A,T,C or G

<400> 176
```
atngggcctc tagagcatgc tcgagcggcc gccatgtgat ggatatctgc agaattcgcc      60
cttagcgtgg tcgcggccga ggtactcatg tatttttttt tttttccaga tctctttccc     120
caagttgcta ttgtaagagt attctgctgc gtgtggatgc agttatacac attaaagcag     180
atctggagtc tgaagtagct ataaagcagc tataaaacag aaatacatgc atagctgcag     240
aaaccatgat aggtagagga cttttctttt ggttttgttt tgttttgttt tgttttgttt     300
ttggttttac agagaagaga tttttattac aaagaaaaaa attccagtga attgtgcaga     360
aatgctggtt tttacaccat cctaaagaaa aactttacaa gggtgttttg gagtagaaaa     420
aaggttataa agttggaatc ttaaattgta aaattaacca ttgagtgtca aagttctaaa     480
agcagaactc atttgtgcaa atgaacataa ggaaagacta ctgtataggt tttttttttc     540
tccttttaaa tgaagaaaag ctttgcttaa gggttgcata cttttattgg agtaaatctg     600
aatgatccta ctcctttgga gtaaaactag tgcttaccag tttccaattg tatttagctt     660
ctggttggaa tttgaaaaaa aaagaaaaaa agaaaaagaa aacctaaata aaataggtga     720
aagttccctg actattcagg tgaatacnca aaaanaaaan nnnnnnaann nnt            773
```

<210> 177
<211> 772
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(772)
<223> n = A,T,C or G

<400> 177
```
acattngacc tgatacgcca gcttggtacc gagctcggat ccactagtaa cggccgccag      60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta cagtaggaaa ataagaataa     120
caacgggcaa aatcttttta gaacatttat gctttatctg ttttagcttc taaaacaatc     180
ctgaaggatg aataattatc atgagtatag cagaatttaa ttttccctgt tgctccaaaa     240
ttttaatgaa aactttacgg ttgagagaaa taggtaaata aaaaaacttc ctaaaattct     300
aaagacaatt gttgaataaa atttaagtga atgagtttgt gcttcatatt taacttttaa     360
ctttccaata ggctttatta aatggaaaac tgaaatttac aaagtcttag agtagaagca     420
tttttatcct ggctagggat tctctaagag aaccagtagc accaagatgc actggaacag     480
tgcaacgaga gagttcatgc cttanggttt agaagcatac aagcaaaggg aatggtgccc     540
acttcttact agaaaaattt cacaggctgg agtctgggcg gaggagcctg ggatgacagt     600
agaagtgtgc aggaagcact aagtctagcc tgtacctgcc cgggcggncg ctcgaagggc     660
gaattctgca gatatccatc acactggcgg ccgctcgagc atgctctana gggcccaatt     720
cgccctatag tgagtcggat tacanttnaa tggccgncgt tttacaacgt cc             772
```

<210> 178
<211> 770
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(770)
<223> n = A,T,C or G

<400> 178
```
attgggcccc tnnagcatgc tcgngcggcc gccagtgtga tggatatctg cagaattcgc      60
ccttcgagcg gccgcccggg caggtacagg ctagacttag tgcttcctgc acacttctac     120
tgtcatccca ggctcctccg cccagactcc agcctgtgaa atttttctag taagaagtgg     180
gcaccattcc ctttgcttgt atgcttctaa accctaaggc atgaactctc tcgttgcact     240
gttccagtgc atcttggtgc tactggttct cttagagaat ccctagccag gataaaaatg     300
```

```
cttctactct aagactttgt aaatttcagt tttccattta ataaagccta ttggaaagtt    360
aaaagttaaa tatgaagcac aaactcattc acttaaattt tattcaacaa ttgtctttag    420
aattttagga agttttttta tttacctatt tctctcaacc gtaaagtttt cattaaaatt    480
ttggagcaac agggaaaatt aaattctgct atactcatga taattattca tccttcanga    540
ttgttttaga agctaaaaca gataaagcat aaatgttcta aaaagatttt gcccgttggt    600
attcttattt tcctactgta cctcggccgn gaccacgcta agggcgaatt ccagcacact    660
ggcggccgnt actagtggat ccgagctcgg tacccaanct tggcgtaatc atggncatag    720
ctgttcctgn gngaaatngn natncgntna caattnccac acatacnann              770
```

<210> 179
<211> 502
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 179

```
cnnnttgacn tgattcgcca acttggtacc gagctcggat ccctagtaac ggccgccagt     60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac ctggcccccca acttctcgaa   120
taaaatgaaa ctatgattct tggcctcact cactaccatg tgacattgat caaatcactt    180
cacctctcca aacctcagag tctttatctg taagatggaa aaagtaacac ctacttcagg    240
ggctgtcatg aggattaaat aaatgtgccc agcaggtagt aagtatacaa cacaaagcat    300
ctaatggttc attcatacat ttgcttattt tgcaattatt ggccacctgc caatgttggg    360
cactgttcta ggcacagggg atacagcaag ggcaaacacc taactactgg tggagggaag    420
acgataaaca aatacgtaaa gatttgtgcc aggtagtgat aaaagcaaag aatgactcat    480
ggagagggtc agctggggag ac                                             502
```

<210> 180
<211> 823
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(823)
<223> n = A,T,C or G

<400> 180

```
gggccttnna gcatgctcga cggccgccat gtgatggata tctgcagaat tcgccctttc     60
gagcggccgc ccgggcaggt actgcgtggt ctccccagct gaccctctcc atgagtcatt    120
ctttgctttt atcactacct ggcacaaatc tttacgtatt tgtttatcgt cttccctcca    180
ccagtagtta ggtgtttgcc cttgctgtat cccctgtgcc tagaacagtg cccaacattg    240
gcaggtggcc aataattgca aaataagcaa atgtatgaat gaaccattag atgctttgtg    300
ttgtatactt actacctgct gggcacattt atttaatcct catgacagcc cctgaagtag    360
gtgttacttt ttccatctta cagataaaga ctctgaggtt tggagaggtg aagtgatttg    420
atcaatgtca catggtagtg agtgaggcca agaatcatag tttcatttta ttcgagaagt    480
tgggggccag gtacctcggc cgcgaccacg ctaagggcga attccagcac actggcggcc    540
gttactagtg gatccgagct cggtaccaag cttggcgtaa tcatggtcat agctgtttcc    600
tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa gcataaagtg    660
taaagcctgg ggtgcctaat gagtgagcta actcacatta attgcgttgc gctcactgcc    720
cgcttttcag tcgggaaacc tgtcgtgcca gctgcattaa tgaatcggcc aacgcgccgg    780
gaaaagcngn ttgcgtattg ggcgctcttn ncgctttctt gcn                     823
```

<210> 181
<211> 501
<212> DNA
<213> Homo Sapien

<220>

<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 181
cantatgacn tgattcgcca acttggtacc ngctcggatc cctagtaacg gncgccattg 60
tnctggaatn cgnccttagc gtggtcgcgg ccgaggtact ttcttcnttt nctnnaattt 120
tccataacct agtgccngnt tgatnccctc acatggntgg ttcacatncn cngtacagan 180
gcncggncac catggganag ggcagcactc ntnccttctn angggatctt ggcctaangg 240
tgtacnaagg gagangatgg antntcttct gncctcncta nggcctaggg aacccagnag 300
canatcccac nacnccttcn atntttnagc caaggagaag cccсttggtg acnttnagtt 360
ccaaccatta tacncagtgn gagaatggat nntcctggtc ccaaccatta cagggtgaag 420
atatnaacag ttaaggaaga tacagtttng atgaggcctc anganggagc agntnacacc 480
atcatannca tatgcaggga a 501

<210> 182
<211> 830
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(830)
<223> n = A,T,C or G

<400> 182
ggcccttnga ngcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tacacgagaa gctccgagga tggctgaagt ccaacgtctc 120
tgatgcggtg gctcagagca cccgtatcat ttatggaggc tctgtgactg gggcaacctg 180
caaggagctg gccagccagc ctgatgtgga tggcttcctt gtgggtggtg cttccctcaa 240
gcccgaattc gtggacatca tcaatgccaa acaatgagcc ccatccatct tccctaccct 300
tcctgccaag ccagggacta agcagcccag aagcccagta actgcccttt ccctgcatat 360
gcttctgatg gtgtcatctg ctccttcctg tggcctcatc caaactgtat cttcctttac 420
tgtttatatc ttcaccctgt aatggttggg accaggccaa tcccttctcc acttactata 480
atggttggaa ctaaacgtca ccaaggtggc ttctccttgg ctgagagatg gaaggcgtgg 540
tgggatttgc tcctgggttc cctaggccct agtgagggca gaagagaaac catcctctcc 600
cttcttacac cgtgaggcca agatcccctc agaangcang agtgcttgcc cttcccatgg 660
tgcccgtgcc tcttgtgctg ngtatgtgaa ccaccccatg tgagggaata aacctggcac 720
tangtctttg aaaaaaanaa aaacntnaaa aaaantccct tcggccgnga ccacgctaag 780
gnccaattcc ancacaatgg gcgnncgtna ctantggatc caaccttnct 830

<210> 183
<211> 484
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = A,T,C or G

<400> 183
ttgacatgat acccaacttg taccgagctc ggatccacta gtaacggccg ccagtgtgct 60
ggaattcgcc ctttcnagcg gccgcccggg caggtacccc agcccgcccc actgagtttg 120
ccttctatcc gggatatccg ggaacctacc agcctatggc cagttacctg gacgtgtctg 180
tggtgcagac tctgggtgct cctggagaac cgcgacatga ctccctgttg cctgtgggca 240
gttaccagtc ttgggctctc gctggtggct ggaacagcca gatgtgttgc cagggagaac 300
agaacccacc angtcccttt ttggaaggca gcatttgcag acttcaacgg gcaaaacctc 360
tgacgcctgc gcctttcgtc gcggncgcag aaaccatttc gnactttaan attgaatctt 420
ctctaaggtt ganaatttct ggatcccttg anaactttta canntgnnct ttantccntt 480
taaa 484

<210> 184
<211> 824
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(824)
<223> n = A,T,C or G

<400> 184
```
ggccttagag ctgctcgacg gccgccatgt gatggatatc tgcagaattc gcccttagcg      60
tggtcgcggc cgaggtacca gattggccac tctagggtag aacaccaggt agattcctaa     120
ggttcctgac tccaggccct ggctcccagt tggcatctct ggacctactt ggggtcacag     180
tgaactcact gccctgaagg gaagatgcct ggctggatat gccacctgct gattggagag     240
tccttggacc ttgagtgaac acaggtggta gccaggcagt gatcatcata ggccttgggt     300
gagccccagt gctgtgttgg cttcaggtct gacacagagc tgtcccagtg gtagtcgcca     360
caggggtgct tgtgtcatca tcccttctcc agctccaggc agctcagcac agagacatag     420
tgtccatttg tttgagtgaa agtaaaagaa gagaacaaga gtctccacct agtaatccag     480
ggaattctcc cagatcttac ccaagacaac caaggcaaga gacacagcat tactgggctg     540
gaggtgcccc ctaatgcagg tatggctgca gtgaacaaag acttagatca caacacccaa     600
atcccttcta atagttggaa agccttncca agaaggatgc cggacaaaca agcccaaact     660
gtgaagacta caacaaatac ctaactcttt caatgcccag acactgaaga atatcccaaa     720
ctttaagacc atccatgaaa acatgacctt accaacaagc taaataagac accagtgacc     780
aatcccagag agatagagat atgtgtcctt tcnnacagag aatt                      824
```

<210> 185
<211> 499
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(499)
<223> n = A,T,C or G

<400> 185
```
cacttgacnt gatacgccaa cttgtaccga ctcggatcca ctagtaacgg ccgccagtgt      60
gctggaattc gcccttagcg tggtcgcggc cgaggtactt tttcttttt nttntatttt      120
tttttttcgt ctccccaaag ctttatctgt cttgactttt taaaaaagtt tgggggcaga     180
ttctgaattg gctaaaagac atgcattttt aaaactagca actcttattt ctttccttta     240
aaaatacata gcattaaatc ccaaatccta tttaaagccc tgacagcttg agaaggtcac     300
tactgcattt ataggacctt ctggtggttc tgctgttacg tttgaagtct gacaatcctt     360
gagaatcttt gcatgcagag gaggtaagag gtattggatt ttcacagagg aagaacacag     420
ccgcanaatg aagggccagg cttactgagc tgccaatgga gggctcatgg gtgggacatg     480
gnaaagaagg cacctagcc                                                  499
```

<210> 186
<211> 504
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(504)
<223> n = A,T,C or G

<400> 186
```
cacttgacnt gatacgccaa cttggtaccg agctcggatc cctagtaacg gccgccagtg      60
tgctggaatt cgcccttagc gtggtcgcgg ccgaggtacc tcaggaggtc tgcaagtgtg     120
tggttaggta aaaactganc tgtgcaaact cactgtatcc aagctcttct catgagagag     180
cggaacaacc tggcaagctt aaaggcaagt gttttcgttc ttttaattaa ataggctgtg     240
```

```
acaaaattaa caataaaact agcccagaac caaccagccc ggtaagtgtc gtgcaaatct     300
tgcagtaaca aaagaccatc tgagagacta cacgttggtc tccagtccta gcaagcgtcc     360
cattctctnc acattcttat caattgtagc ttgacatgtt atctccttgg cacattccat     420
aggaaaccag cctctttctn catctcgtag tcgntccccc ttataccagc catcgctgac     480
acgtttgata gatgaagacg acgt                                            504

      <210> 187
      <211> 822
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(822)
      <223> n = A,T,C or G

      <400> 187
gggcctctna gctgctcgnc ggccgccatg tgatggatat ctgcagaatt cgcccctttcg     60
agcggccgcc cgggcaggta cgcggggact gggtttttct ccttttgtag ccttttcctt     120
tagtctcctc ttcccggtgg ttggtaaaaa gaggtgaatt gacagcctat gttgaagaca     180
ctgtgctttt ctcaagaagg acatccaaac agcaagtcta cttctttctc tttaacgatg     240
tgctcattat caccaagaag aagagtgaag aaagttacaa cgtcaatgat tattccttaa     300
gagatcagct attggtggaa tcttgtgaca atgaagagct taattcttct ccagggaaga     360
acagctccac aatgctctat tcaagacaga gctctgccag tcacctcttt actctgacag     420
tccttagtaa ccacgcgaat gagaaagtgg agatgctact aggagctgag acgcagagcg     480
agcgagcccg ctggataact gccctgggac acagcagcgg gaagccgcct gcagaccgaa     540
cctcactgac ccaggtggaa atcgttaggt catttactgc taagcagcca gatgaactct     600
ccctgcaggt ggctgacgtc gtcctcatct atcaacgtgt cagcgatggc tggtatgagg     660
gggaacgact acgagatgga gaaagaagct ggtttcctat ggaatgtgcc aaggagataa     720
catgtcaagc tacaattgat aagaatgtgg agagaatggg accttgctag gactggagac     780
caacgtgtag tctctcaaan gnctttggt actgcaagat tg                         822

      <210> 188
      <211> 504
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(504)
      <223> n = A,T,C or G

      <400> 188
tatgancatg atacgccaac ttggtaccga gctcggatcc actagtaacg gcccgccagt     60
gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac caaaaaagta aacattgata     120
atatggcctg acaacaatca gatatgctaa gctctagaag caaaagcaag gtaggattgc     180
ctccaaatgt tgacaggtat tagccatacc acagtaacta gatctaatgt gagggctaaa     240
tgcctggaga ggcagaaccc taaaggatgc ttagttatag ctccatgctg ccgccgagtg     300
gcttgatgct ccattacacc ctccttggat ccaaccttcc attaaggctg aaggctctag     360
agggcagagt attcaagatg ttagatctgg tccaagccca aattctagag ttaaaagcag     420
aggggttctt agtggctgaa aaaaaacaaa acctgatgac atttgggact ccagttttga     480
ggaaaggctc tgatgatgag gctt                                            504

      <210> 189
      <211> 842
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(842)
      <223> n = A,T,C or G
```

<400> 189
nnnnnnnntt tttgaaccgg ccctntnang catgctcgac ggccgccatg tgatggatat 60
ctgcagaatt cgccctttcg agcggccgcc cgggcaggta cccttctcgc ttttgccatt 120
agccaaggat agaagctgca gtggtattaa ttttgatata atctttcaaa ccagcttcat 180
gtggcttccc ttttctttgt tcaagatgag ggccaggagg ggaaacatca cacctgccct 240
aaaccctgtt cctggaggtc agcatttgat ctgttgcaag cccctctttc tgtcccctct 300
tcctaccctg cctcccatga ctttgctcct cacacttttg gaaccatgcc ttccgggggg 360
gcccatctct tctggccgtc cttgtctctg ggccacttgg agtgtgtgat aaatcagtca 420
agctgttgaa gtctcaggag tctctggtag cctgcagaag taagcctcat catcagagcc 480
tttcctcaaa actggagtcc caaatgtcat caggttttgt tttttttcag ccactaagaa 540
cccctctgct tttaactcta gaatttgggc ttggaccaga tctaacatct tgaatactct 600
gccctctaga gccttcagcc ttaatggaag gttggatcca aggagggtgt aatggagcat 660
caagccactc ggcggcagca tggagctata actaagcatc ctttagggtt ctgcctctcc 720
aggcatttag cccctacatt agatctagtt actgtggtat ggctaatacc tgtcaacatt 780
tggaggcaat cctaccttgc ttttgcttct agagcttagc atatctgatg gttgcaggcc 840
cg 842

<210> 190
<211> 503
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(503)
<223> n = A,T,C or G

<400> 190
actatgacct gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag 60
tgtgctggaa ttcgcccttt cgagcggccg cccgggcagg taccatgctg acttcttggt 120
atcttttaag gcctaatttt cccttccttg agattactgt agtgtgttcc agctaatttc 180
tatttggaaa cgagttggaa cagctgaaaa ctaggtatta ttgaaggcaa agcagcctca 240
cgtcagtttt ttatcagctc atttgggaag tttttttttt tttttttaa ttaattagaa 300
agtaggctgg acacggtggc tcatgcctat aatcccagca cttggggagg ccgaggatct 360
cctctctggt ggatcacttg agggcaggag ttaagagacc atcctggcca acatgatgaa 420
accctgtctc tactaaaaat acaaaaagta nctgggcgtg gtggcatact cttacaatcc 480
cagctacttg ggaggctgag gca 503

<210> 191
<211> 829
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(829)
<223> n = A,T,C or G

<400> 191
gggcctctga gcatgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac tttttttttt tcttttttta catctgattt taatgcttcg 120
ttaacttcaa aaggaactgg tagagttcag aaggtgagct gttgttttc taaacctctt 180
cccaggaagg ggacattgac acttgaattt ttgtcacctt tttcctcatt agaaggaaag 240
tagaaagcct tactgtagga tttttaaaaa aaaatccatc tcaccccata ttggtcttaa 300
ataagtatag actaattaac ctaagctacc tttaacaacg tagaatttag atgggttcat 360
atatgtgaga aaaacctgaa tataggacag ggtcctact tttttcccca cctctgtcgc 420
ccaggctaga gtatagtggt gtgatcttgg cccactgcaa cctctgcttc ctaggttcaa 480
gtgattctcc tgcctcagcc tcccaagtag ctgggattgt aagagtatgc caccacgccc 540
agctactttt tgtattttta gtagagacag ggtttcatca tgttggccag gatggtctct 600
taactcctgc cctcaagtga tccaccagag aggagatcct cggcctnccc aagtgctggg 660
attataggca tgagccaccg tgtccagcct actttctaat taattaaaaa aaaaaaaaaa 720

aaactttcca aatgagctga taaaaaactg acgtgaggct gctttgcctt caataatacc 780
tagttttcag ctgtccaact cgtttccaaa tagaaattaa gctgggang 829

<210> 192
<211> 503
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(503)
<223> n = A,T,C or G

<400> 192
ntatgaccat gattacgcca agcttggtac ccgagctcgg atccactagt aacggccgcc 60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtactgcct ttgggcttct 120
tctctctcct gtttctcct ctcgaattct ttactgtttt aatacattgt tcttctggct 180
gaggctggtc aaagctacac tgatcttcaa ataaaggctc gtcaatgcta cactgttctt 240
caagcaacgg ctggtgaact tgttctgaca aaggatggtc gacttttctt gcttgcttcc 300
tatgtctttc ctcttcagct aaatagagat gtttcagatt atctgggtat cgatctgtga 360
attgagattc cagtgacgtt tgagccttct tttccttccg tagcaatttc ttgtaacttt 420
gctgtatttt cagttttctt cgaaaagcaa agccttgtcc ctcgcgaacg ctccccacga 480
agcttgcggg tggttaggcc gca 503

<210> 193
<211> 834
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(834)
<223> n = A,T,C or G

<400> 193
ancggctctc tagagctgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggcncgag gtacaattca ttatgtgttt cattaattac ctttattaaa 120
aacaacacaa ttatattaca atagggacaa aaaatgttta agcaaatgaa aacgaaacca 180
tgacataccc aaactcagga ggaggcaaca aaggcagtgc taaagggaag cttacagctc 240
cagatgctta aattaaaaag aagaaagatc tcaaacccat gctaaaggga agcttacagc 300
tacagatcct taaattaaaa agaagaaaga tctcaaaccc atgctaaagg gaagcttaca 360
gctgcagatg cttaaattaa aaagaagaaa gatctgaaac ccttgctaaa gggaagctta 420
tagctgcagg tgcttaaatt aaaaagaaga aagatctcaa atcaataacc taacattaca 480
cctgaagggg gggaaaaaaa ctaatgacaa accaagcaaa aggaagaaaa taacagatta 540
gagcagagat aagcagaata agaccagaaa aaaggaaaaa aacactgagt ttgttttttt 600
aaagatcaat aaaaatttta aaactcacag ctatattaag aaaaaagaga aatctcaaat 660
actaaaatca taagtaaaag angtgacagt acaggaataa gaatgtgaga cagaagacat 720
ggcggcctac cacccgcaag ccttcgtggg gagcgttcgc ganggacaag gctttgcttt 780
tcgaagaaaa ctgaaaatnc cgcaaagttc cagaaattgt tcngaagaaa agaa 834

<210> 194
<211> 502
<212> DNA
<213> Homo Sapien

<400> 194
cacttgacct gattcgccaa gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgccctttc gagcggccgc ccgggcagga cgctgaggcc tgggagtctc 120
ttgactccac tacttaattc cgtttagtga gaaacctttc aattttcttt tattagaagg 180
gccagcttac tgttggtggc aaaattgcca acataagtta atagaaagtt ggccaatttc 240
accccatttt ctgtggtttg ggctccacat tgcaatgttc aatgccacgt gctgctgaca 300
ccgaccggag tacctcggcc gcgaccacgc taagggcgaa ttctgcagat atccatcaca 360

```
ctggcggccg ctcgagcatg catctagagg gcccaattcg ccctatagtg agtcgtatta      420
caattcactg gccgtcgttt tacaacgtcg tgactgggaa aaccctggcg ttacccaact      480
taatcgcctt gcagcacatc cc                                               502

      <210> 195
      <211> 848
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(848)
      <223> n = A,T,C or G

      <400> 195
gnnnnnnntt tnnaatgggc ctctnnagca tgctcgagcg gccgccatgt gatggatatc       60
tgcagaattc gcccttagcg tggtcgcggc cgaggtactc cggtcggtgt cagcagcacg      120
tggcattgaa cattgcaatg tggagcccaa accacagaaa atggggtgaa attggccaac      180
tttctattaa cttatgttgg caattttgcc accaacagta agctggccct tctaataaaa      240
gaaaattgaa aggtttctca ctaaacggaa ttaagtagtg gagtcaagag actcccaggc      300
ctcagcgtcc tgcccgggcg gccgctcgaa agggcgaatt ccagcacact ggcggccgtt      360
actagtggat ccgagctcgg taccaagctt ggcgtaatca tggtcatagc tgtttcctgt      420
gtgaaattgt tatccgctca caattccaca caacatacga gccggaagca taaagtgtaa      480
agcctggggt gcctaatgag tgagctaact cacattaatt gcgttgcgct cactgcccgc      540
tttccagtcg ggaaacctgt cgtgccagct gcattaatga atcggccaac gcgcggggag      600
aggcggtttg cgtattgggc gctcttccgc ttcctcgctc actgactcgc tgcgctcggt      660
cgttcggctg cggcgagcgg tatcagctca ctcaaaggcg gtaataccgg tattcacaga      720
attcagggga taacgcagga aagaacatgt gagcaaaagg ncagccaaag gccaggaacc      780
cgtnaaaagg ccgcgttgct ggcgttnttc cataggctcc gcccccttga cgagcatnac      840
aaaaatct                                                               848

      <210> 196
      <211> 511
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(511)
      <223> n = A,T,C or G

      <400> 196
canntatgac ctgattacgc caagcttggt accgagctcg gatccactag taacggccgc       60
cagtgtgctg gaattcgccc ttagcgtggt cgcggccgag gtactttttt tttttttttt      120
tttttttttt ttttagggtt ataaaagccc ttttataaag ccatttttaa acaaaacaaa      180
aaaaaagttt acaaaagaaa aaaagatnca gaaaaagaat aacttgcttc atatgtccca      240
aaaagagaaa aaaataaagg ggacaatgcc aacatgctca acaataaagg cttctttttc      300
ttattttttt aatacaaaat ncaagcaaag gatacacata cttaaaacag agctcaggag      360
canacacgca ntcctggaaa cccttcaata aaancaaagc aggagtttgn tttttctttg      420
tctatgcana tacatacaga gactgggata tgtaaaaatt aagtatnaca aaagaccatt      480
acacgattct accaatgcat gttgcatctn g                                     511

      <210> 197
      <211> 816
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(816)
      <223> n = A,T,C or G
```

<400> 197
gggcctctag agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg tactaaggaa gttaaagttt gaatgtaacc actttattta 120
aaaggttttt ttctttaatt taaatgaaat ggggttgaag tgaacatgat tttgttgacc 180
atgttcgtga attacagatg caacatgcat tggtagaatc gtgtgatggt cttttgtgat 240
acttaatttt tacatatccc agtctctgta tgtatctgca tagacaaaga aaaaacaaac 300
tcctgctttg cttttattga agggtttcca ggactgcgtg tctgctcctg agctctgttt 360
taagtatgtg tatcctttgc ttgtattttg tattaaaaaa ataagaaaaa gaagccttta 420
ttgttgagca tgttggcatt gtccccttta tttttttctc ttttgggac atatgaagca 480
agttattctt tttctgtatc tttttttctt ttgtaaactt ttttttgtt ttgtttaaaa 540
atggctttat aaaagggctt ttataaccct aaaaaaaaaa aannnnnnna aaaaaaaaaa 600
gtcctcggcc gcgaccacgc taagggcgaa ttccagcaca ctggcggncg ttactagtgg 660
atccgagctc ggaccaagct tggcgtaatc atggncatag ctgttcctgt gtgaaatgtt 720
atccgctcac aattcccaca catacaaccc ggagcataaa gtgtaaacct ggggtgccta 780
atgagtgagc tactcaataa ttgcgttgcg ctcang 816

<210> 198
<211> 498
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

<400> 198
tgattcgcca agcttggtac cgagctcgga tccactagta acggcccgcc agtgtgctgg 60
aattcgccct tcgagcggnc gnccgggcag gtacaattca gagcaggtgt ccatagaaac 120
aactaggntt gaaaaaactg taagacaatt cacagttgaa atcaaaccaa cactgtgaat 180
gtgttaaata cttgccatat aacaacactt taacattgat cttgctaaat aaggctatga 240
ttcataagat gcatggattt ccaaagctgn ttaacattct tataaattaa ttcacaggat 300
tcaaatagtt gctttttagc ttcaactggg tattagcaaa aatnatacaa aatgatcccc 360
gtgcaagcac aaatttacct tccttctaaa taaaacatga cagattatat tacaacttga 420
tagcctctct tttaaaaagt ctgtgacatt attaaagagg tgacggaatg cttgntttgc 480
aaaccccaac acatcttt 498

<210> 199
<211> 837
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(837)
<223> n = A,T,C or G

<400> 199
nnnnnnntnn cantgggcct ctagagctgc tcgacggccg ccatgtgatg gatatctgca 60
gaattcgccc ttagcctggt cgcggccgag gtaccttgag atctgagcaa ctgtgttaat 120
gaagtaatag caatggtcca cagtgaaaga tgtgttgggg tttgcaaaac aagcattccg 180
tcacctcttt aataatgtca cagacttttt aaaagagagg ctatcaagtt gtaatataat 240
ctgtcatgtt ttatttagga aggaaggtaa atttgtgctt gcacggggat cattttgtat 300
tatttttgct aatacccagt tgaagctaaa aagcaactat ttgaatcctg tgaattaatt 360
tataagaatg ttaaacagct ttggaaatac atgcatctta tgaatcatag ccttatttag 420
caagatcaat gttaaagtgt tgttatatgg caagtattta acacattcac agtgtttgtt 480
tgatttcaac tgtgaattgt cttacagttt tttcaaacct agttgtttct atggacacct 540
gctctgaatt gtacctgccc gggcggccgc tcgaagggcg aattccagca cactggcggc 600
cgttactagt ggatccgagc tcggtaccaa gcttggcgta atcatggtca tagctgnttc 660
ctgtgtgaaa ttggtatccc gctcacaatt ccacacaaca tacgagccgg aagcataaag 720
tgtaaagcct ggggtgccta atgagtgagc taactccatt aattgcgttg cgctcactgg 780
cccgctttnc agtcnggaaa cctgtctgcc anctgcatta atgaatcggc caccccg 837

<210> 200
<211> 506
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 200
```
nnnnttgacc tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tactgcatcc ataatttatc     120
gccatgtgca acagctttgc gttttctaag gcacaatttt taatgaaatg atgtgtagat     180
ttcaatctaa taacagctca tccaaatgac aaatatggtc gaaatccctc cagtggctga     240
ggaaatttct gcacctatat ggaacccaca tgcaaagaac ccatctagca tgtaataaat     300
aatcgctagc catactcaat aagacacgga aaaattattg cttacataac agaaaaacat     360
ctacttgacc cccttttatg actacatcaa tctattagga gtgtatccat agtctacatt     420
cacaaaatgt catcttgact tatttgccat tgatttaagg cagaataaat agtccccctt     480
tccccagtct taacaacaaa aaacaa                                          506
```

<210> 201
<211> 864
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(864)
<223> n = A,T,C or G

<400> 201
```
ccnntanagc atgctcgacg gccgcccggg caggtacctt ggaagttatg tcattaatat      60
aggctggttc atcaaataaa gcaaaacctt gcaatatcag ctagatttac actccgggac     120
gttgcccaaa ggtaggaaga aagcaggggg aaatatttca gtcatcattt ccaaagtcat     180
tatcaaaatc tgtgaggaag tttaatcttc caaagagtca atgtcagaca tcaggcctct     240
gttgcctgct tctctcgagg cactagatta ggagtcttca ataagagact taacatgagg     300
tatatggaag atgaggcacc gagataagtt catcattagg tgtgagcact gctcacccctt    360
gctggcaagt tctccttaag ggcctgaagc acaggtgtcc aaagaaaagc gttaagtcca     420
tcttaataga atctatgtgg tatatgatgt ggtcagcccc tggtctgtga tcagcaagaa     480
cctacagcac agattatgcc ctgcccactt caatgaatac ctactctcct ncattctcca     540
tcactttttt gctatcaaga ctccggacct tgcccatgga gaagtttaga gaggaactct     600
tgtggagagc tggttaattt tctgccctgt gcgacaagtt tcaacttggc caagaaangg     660
agtcaagtta ttaaaaagca tcacaatgta gaatcttcca ggctgggttt tttggntttt     720
tnggtggttn aanactgggg gnaaaagggg ggacctattt aaattccngg cctttaaaat     780
caaatgggcc aaaattaagt tcaaggaatg gaccattttt nggggnaaat ggttngaacc     840
ttntngggan ttcccncctt ccct                                            864
```

<210> 202
<211> 505
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(505)
<223> n = A,T,C or G

<400> 202
```
gnntnanacn nttnactaat antganttag tnccgactcg atccctctna ctncantnan      60
ancgntngaa ttgcccttnn tagcggccnt ccngncaggt acaaccagtt tggaaaacag     120
```

```
tntcacagtt tttttaaaaa ttacatatac aaccancaac tgacccagcc atttcactcc      180
taggtattta cccaagatna actgaagtgt agatacaagc anagacttgn gcacaagtgt      240
tcatggtaag ctttactngc antagctcca aactanggac aactcaaata gccaacangg      300
aaatggacaa attatgttac tttcatacag tggaatattc tcttgtgata aaaataantg      360
aacanttgat acatggatga atctcaaaat aattatgctg agtaaaagaa gccagacaaa      420
atgtacagtg catacagcta ttcatgtggg tgccagctcc atcccccagt gacctcttca      480
tacggncaga gggtggcatg gcanc                                            505
```

<210> 203
<211> 819
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(819)
<223> n = A,T,C or G

<400> 203

```
ggcctcngca gcatgctcga ncggccgcca tgtgatggat atctgcagaa ttcgccctta       60
gcgtggtcgc ggccgaggta cgcgggagag caggaccgga gcgcgggcca agctggagat      120
ggatgatgct gaccctgagg aaagaaacta tgacaacatg ctgaaaatgc tgtcagatct      180
gaataaggac ttggaaaagc tattagaaga gatggagaaa atctcagtgc aggcgacctg      240
gatggcctat gacatggtgg tgatgcgcac caaccctacg ctggccgatt ccatgcgtcg      300
gctggaggat gccttcgtca actgcaagga ggagatggag aagaactggc aagagctgct      360
gcatgagacc aagcaaaggc tgtaggcccc actggcccac cacagctgcc atgccaccct      420
ctgcccgtat gaagaggtca ctgggggatg gagctggcac ccacatgaat agctgtatgc      480
actgtacatt ttgtctggct tcttttactc agcataatta ttttgagatt catccatgta      540
tcaattgttc acttattttt atcacaagag aatattccac tgtatgaaag taacataatt      600
tgtccatttc cctgttggct atttgagttg tccctagttt ggagctattg cgagtaaagc      660
taccatgaac atttgtgcac aagtctttgc ttgtatctac acttcagttt atcttgggta      720
aatacctang agtgaaatgg cttgggtcaa tntgttggtt ggatatgtaa ttttttaaaa      780
aaaactgnga tactgttttc caaactgggt tgtccctct                             819
```

<210> 204
<211> 840
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(840)
<223> n = A,T,C or G

<400> 204

```
gnnnnntttn nnctnntgga acccgttttg nnaagctgct cgacggccgc catgtgatgg       60
atatctgcag aattcgccct tagcgtggtc gcggccgagg taccttnaga tctgagcaac      120
tgtgttaatg aagtaatagc aatggtccac agtgaaagat gtgttggggt ttgcaaaaca      180
agcattccgt cacctcttta ataatgtcac agactttttt aaaagagagg ctatcaagtt      240
gtaatataat ctgtcatgtt ttatttagga aggaaggtaa atttgtgctt gcacggggat      300
cattttgtat tatttttgct aatacccagt tgaagctaaa aagcaactat ttgaatcctg      360
tgaattaatt tataagaatg ttaaacagct ttggaaatac atgcatctta tgaatcatag      420
ccttatttag caagatcaat gttaaagtgt tgttatatgg caagtattta acacattcac      480
agtgtttgtt tgatttcaac tgtgaattgt cttacagttt tttcaaacct agttgtttct      540
atggacacct gctctgaatt gtacccctca gtcaccagca aaagcatttc caccccttc       600
aacccccaat cagaccactg cattcagtgg tattggagga ctttcatcac agcttccagt      660
aggtgggtct tggcacaggc agnctgactg gtatangaac tggtgctctt ggactccctg      720
cagtgaataa cgaccctttt gtacctgccc gggcggccgc taagggcgaa ttccacacac      780
tggccggccg ttactagtng gatccnaact cggtccaaan cttggcgtat tcatggtcnt      840
```

<210> 205
<211> 497

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(497)
<223> n = A,T,C or G

<400> 205

```
nnnnttgacc tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct tagcgtggtc gcggccgagg tacatttact ataaaagctg     120
ttgcatttta gacaacttgt tgtttttatt ttttactgtt tctcagaggc atttagaat      180
aaatacttta aatgaaagtt agtataaccg atatagaaca ctggcccacc cagagcagta     240
acatcttttg gacggactca catatgaggt ggatcatttc agtttgttaa atcttacact     300
gtgtatagat aactataata tgtattgcat taatcacact acatagaaag gaaatgtcat     360
ggaagttcgc tagtgaaaaa caaaaagtta cccattattt ttattaaaga gtagggacta     420
gcttttggag tatgagaaaa aaaatcagat atacttcctc aggaacaata aatcactcac     480
ttgcctcacc tgttttt                                                    497
```

<210> 206
<211> 820
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 206

```
gggcctntag aagcatgctc gagcggccgc cagtgtgatg gatatctgca gaattcgccc      60
tttcgagcgg ccgcccgggc aggtacatgt attgaagcta gaatcgagtc aagaaaaata     120
aagccccatt ctccaactgc aaaatgtgct ttcccataat gaacactagt caccagcaca     180
gaataatctc caacattttc taaattctaa ttgccaactg tttctattta tatttgattt     240
atatttcatt tggagtctgt tacatggcag cttaggcaga ctagatcttg ttttttccaa     300
tgcagcataa tgagtatgat ctatttcttt tcaaataatc tttgagatcc caggaaaaaa     360
aatgctctgc tccattgagc tataatgtaa atgtgtttgt ttaaaaaaca ggtgaggcaa     420
gtgagtgatt tattgttcct gaggaagtat atctgatttt ttttctcata ctccaaaagc     480
tagtccctac tctttaataa aaataatggg taactttttg tttttcacta gcgaacttcc     540
atgacatttc ctttctatgt agtgtgatta atgcaataca tattatagtt atctatacac     600
agtgtaagat ttaacaaact gaaatgatcc acctcatatg tgagtccgtc caaaagatgt     660
tactgctctg ggtgggccag tgttctatat cggttatact aactttcatt taaagtattt     720
attctaaaat gcctctgaga aacagtaaaa ataaaaacca caagttgcta aaatgcaaca     780
gcttttatag taaatgtcct tgggccgcga ccacgcttag                           820
```

<210> 207
<211> 496
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G

<400> 207

```
cnnttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt agcgtggtcg cggcccgagg tacaaaagac aaaatcagag     120
ttcaatttca gcagcaagac ttatcaagaa tttaatcact atttgacatc aatggttggt     180
tgcctgtgga cgtccaaacc ctttgggaaa ggaatatata ttgaccctga aatcctagaa     240
aaaactggag tggctgaata taaaaacagt ttaaatgtag tccatcatcc ttctttcttg     300
agttacgctg tttccttttt gctacaggaa agcccagaag aaaggacagt aaatgtgagc     360
```

```
tctattcngg gaaagaaatg gagctggtat ttggactatt tattttcaca ngggttacaa      420
ggcttgaaac tttttataag aagtagtggt catcattctt ncattcccag agcagaaggc      480
ataaactgca caatca                                                      496
```

<210> 208
<211> 810
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(810)
<223> n = A,T,C or G

<400> 208

```
gcatgctcga cggcccgcca gtgtgatgga tatctgcaga aattcgccct ttcgagcggc       60
cgcccgggca ggtactcctt gaggatggca gtctgtcagt gaaatgaaaa tgggaactca      120
agatgagcca ctttgctcta gcaatgagga gtgagtttag tccagtgtgt tcagtttatg      180
tcaacattca tttaatattg attgttgcag tttatgccct ctgctctggg aatggaagaa      240
tgatgaacac tacttcttat aaaaagtttc aagccttgta acccctgtga aaataaatag      300
tccaaatacc agctccattt ctttccccga atagagctca catttactgt cctttcttct      360
gggctttcct gtagcaaaaa ggaaacagcg taactcaaga aagaaggatg atggactaca      420
tttaaactgt ttttatattc agccactcca gtttttccta ggatttcagg gtcaatatat      480
attcctttcc caaagggttt ggacgtccac aggcaaccaa ccattgatgt caaatagtga      540
ttaaattctt gataagtctt gctgctgaaa ttgaactctg atttgtcttt ttgtacctcg      600
gccgcgacca cgctaagggc gaattccagc acactggcgg ccggtactag tggatccgag      660
ctcggtccaa gcttggcgta atcatgggca tagctgtttc ctggtgtgaa attgntatcc      720
gctcacaatt ccacacaaca tacgaaccgg aagcattaag tgtaaagcct ggggtgccta      780
atgagtgagc taacttacat taattgcgnt                                       810
```

<210> 209
<211> 495
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G

<400> 209

```
cnnttgacct gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag       60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta caactctcca gggcacaata      120
cgtttacagc tgcctttcct tcacatactt ttctaattca gaactactca caattctaag      180
caaattccca ttcacgaagt ctgtccataa tgcgaccttc tctttttta acatatacat       240
cttaaaaaac aaatatataa aaaattctta ttttgctgga atgctttcaa tttttcacat      300
tttacatgat catcacattt atttcttata ttgaaaggca tggtttctgt tgacatgtcg      360
tgcaaagcca aaaaaaaaaa anaaaaaaaa aagggctgga ttgcttttca attggtctaa      420
cacttttcct tgtctaggct ttggatttta aagttcatga cagccccacc accagtagaa      480
accccaaggc ttgca                                                       495
```

<210> 210
<211> 820
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(820)
<223> n = A,T,C or G

<400> 210

```
gggcctcaga gctgctcgan cggccgccat gtgatggata tctgcagaat tcgccctttc     60
gagcggccgc ccgggcaggt acccacgttt tgctccacac tccttgaccg caggggctcg    120
gacacaaacc cctgtcacca ggagagtcag tcagcactac ttgggagggc taaagggaaa    180
tttggaaata aaattccaaa gtttggagta aaaaaattca agtgttgatt ttatattctt    240
tccctttctg acacagccta aagcgtaggg ggaacatgtg tttatctgtg ggagataaac    300
aagatggagt cccaaagact ttaacaaaat atttttttaa aaatccacta gaatagaaaa    360
tacattattt agatatactt tatgctgaga gtgagtatat atgcttgtcc tatttaaact    420
tgtgagaaaa agtggtatcc cttgatacat ttagaaatat gggggctatc ttgtttcatt    480
gtgggggtgg ggcagaagga gaataaatgc aggatgaccc tgttgaagga atcttancat    540
ggccaacagg ggacgtttcc agtcgattac caggaaatgc aagccttggg gtttctactg    600
gtggtggggc tgtcatgaac tttaaaatcc aaagcctaga caaggaaaag tgttagacca    660
attgaaaagc aatccagccc tttttttttt nnnnnttttt tttggctttg cacgacatgt    720
caacagaaac catgcctttc aatntaagga aataaatgtg atgatcatgt aaaatgtgaa    780
aaattgaaag cattncacca aataaggaat tttttatttn                           820
```

<210> 211
<211> 499
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(499)
<223> n = A,T,C or G

<400> 211

```
canttgactg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag     60
tgtgctggaa ttcgccctta gcgtggtcgc ggcccgaggt acaactctcc agggcacaat    120
acgtttacag ctgcctttcc ttcacatact tttctaattc agaactactc acaattctaa    180
gcaaattccc attcacgaag tctgtccata atgcgacctt ctcttttttt aacatataca    240
tcttaaaaaa caaatatata aaaaattctt attttgctgg aatgctttca atttttcaca    300
ttttacatga tcatcacatt tatttcttat attgaaaggc atggtttctg ttgacatgtc    360
gtgcaaagcc aaaaaaaaaa aaaaaaaaaa aagggctgga ttgcttttca atngggtcta    420
acacttttcc ttgtctaggc tttggatttt aaagttcatg acagccccac caccagtaga    480
aaccccaagg cttgcattt                                                 499
```

<210> 212
<211> 821
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(821)
<223> n = A,T,C or G

<400> 212

```
gggcccntan agcatgctcg agcggccgcc atgtgatgga tatctgcaga attcgccctt     60
tcgagcggcc gcccgggcag gtacccacgt tttgctccac actccttgac cgcaggggct    120
cggacacaaa cccctgtcac caggagagtc agtcagcact acttgggagg gctaaaggga    180
aatttggaaa taaaattcca aagtttggag taaaaaaatt caagtgttga ttttatattc    240
tttccctttc tgacacagcc taaagcgtag gggggaacatg tgtttatctg tgggagataa    300
acaagatgga gtcccaaaga ctttaacaaa atattttttt aaaaatccac tagaatagaa    360
aatacattat ttagatatac tttatgctga gagtgagtat atatgcttgt cctatttaaa    420
cttgtgagaa aaagtggtat cccttgatac atttagaaat atgggggcta tcttgtttca    480
ttgtgggggt ggggcagaag gagaataaat gcaggatgac cctgttgaag gaatcttagc    540
atggccaaca ggggacgttt ccagtcgatt accaggaaat gcaagccttg ggtttctac     600
tggtggtggg gctgtcatga actttaaaat ccaaagccta gacaaggaaa agtgttagac    660
caattgaaaa gcaatccagc cctttttttt tttttttttt ttggctttgc acgacattgt    720
taacagaaac catgcctttc aatattagaa ataaatgtga tgatcatgtt aaatgtgaaa    780
aattggaagc cttcagcaaa ataagaattt ttatttnttt n                        821
```

<210> 213
<211> 497
<212> DNA
<213> Homo Sapien

<400> 213
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta caaaacaata gtctaaacta 120
acacgaactg ttacctggtc tattaaagga tacacggtat ccactaaaca gacagatcct 180
tatttccctg cttgatgttg caaagccctt ggcaaccagg ggcaaaggtc actggggttt 240
gactaactgg ggctgagtgg cagctatgac tgtccttcag atttttgagt tgtttttgaa 300
attaaaagct tctaaaagtt gcatcaacat cctcctaagc ccccatagga ttgtaacacc 360
accacaaaag gccaccaaca ctttttaaac aaagtgaaaa ctgtctgaca ccaatcatct 420
tgaaaactcc atggcaagtg cattagctat gatttcatca cttacaggta gagaagctta 480
ctgtctactg gtgtggg 497

<210> 214
<211> 817
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(817)
<223> n = A,T,C or G

<400> 214
ggccttanag ctgctcgncg gccgccatgt gatggatatc tgcagaattc gccctttcga 60
gcggccgccc gggcaggtac tctcagtcat atgcagaaat acttttttt taattaatag 120
ttacaggctt gttggtccag tgggatttgg gtaggggag aaagatacct tctaaaatgg 180
atcaatagaa ccaaaataat acagcatgtt ctataaccac aaggaaatca aatgatcctg 240
tcatgattcc agttagtcat aaccatgtta gcagtgctaa atgcatttta gaaatggtga 300
cttctgtggt tttcctagca tttgtctcta acaaatggtg aaataattac tcatggccct 360
ctctgccatt gtctttcatt ttttcacagt gaaattagac ccctttactt caccattctg 420
ccactgcaaa ttaagtataa agaaaatagc aagagtgtcc acaccagtag acagtaagct 480
tctctacctg taagtgatga aatcatagct aatgcacttg ccatggagtt ttcaagatga 540
ttggtgtcag acagttttca ctttgtttaa aaagtgttgg tggccttttg tggtggtgtt 600
acaatcctat gggggcttan gaggatgttg atgcaacttt tagaagcttt taatttcaaa 660
aacaactcaa aaatctgaag gacagtcata gctgccactc agcccccagtt agtcaaaccc 720
cagtgacctt tgcccctggt tgccaagggc tttgcaacat caagcangga aataaggatc 780
tgnctgttag tgggataccg ggtatccttt aatagac 817

<210> 215
<211> 495
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G

<400> 215
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtccg gccgaggtac catgctgact tcttggtatc 120
ttttaaggcc taatttcccc ttccttgaga ttactgtagt gtgttccagc taatttctat 180
ttggaaacga gttggaacag ctgaaaacta ggtattattg aaggcaaagc agcctcacgt 240
cagtttttta tcagctcatt tgggaagttt tttttttttt ttttttaatt aattagaaag 300
taggctgggc acggtggctc atgcctataa tcccagcact tggggaggcc gaggatctcc 360
tctctggtgg atcacttgag ggcaggagtt aagagaccat cctggccaac atgatgaaac 420
cctgtctcta ctaaaaatac aaaaagtagc tgggcgtggt ggcatactct tacaatccca 480
gctacttggg aggcn 495

<210> 216
<211> 823
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(823)
<223> n = A,T,C or G

<400> 216
```
gggcctcaga gcatgctcgn cggccgccag tgtgatggat atctgcagaa ttcgcccttt      60
cgagcggccg cccgggcagg tacttttttt tctttttta catctgattt taatgcttcg      120
ttaacttcaa aaggaactgg tagagttcag aaggtgagct gttgttttc taaacctctt      180
cccaggaagg ggacattgac acttgaattt ttgtcacctt tttcctcatt agaaggaaag      240
tagaaagcct tactgtagga tttttaaaaa aaaatccatc tcaccccata ttggtcttaa      300
ataagtatag actaattaac ctaagctacc tttaacaacg tagaatttag atgggttcat      360
atatgtgaga aaaacctgaa tataggacag gggtcctact tttttcccca cctctgtcgc      420
ccaggctaga gtatagtggt gtgatcttgg cccactgcaa cctctgcttc ctaggttcaa      480
gtgattctcc tgcctcagcc tcccaagtag ctgggattgt aagagtatgc caccacgccc      540
agctactttt tgtattttta gtagagacag ggtttcatca tgttggccag gatggtctct      600
taactcctgc cctcaagtga tccaccagag aggagatcct cggcctnccc aagtgctggg      660
attataggca tgagccaccc gtgcccagcc tactttctaa ttaattaaaa aaaaaaaaaa      720
aaaaacttnc caaatgagct gatnaaaaac tgacgtgang ctgctttgcc ttcaataata      780
cctagttttc actggtccaa ctcgtttcca aatagaaatt acg                        823
```

<210> 217
<211> 827
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(827)
<223> n = A,T,C or G

<400> 217
```
nnnnnnnggc ctntnnagca tgctcgacgg ccgccatgtg atggatatct gcagaattcg      60
ccctttcgag cggccgcccg ggcaggtact gtatcattgg cagatgtgac gtcaccgaca      120
accagagtga agtggcggac aaaactgagg attacctgtg gctgaagttg aaccaagtgt      180
gttttgacga cgatggcacc agctccccac aagacaggct cactctctca cagttccaga      240
agcagttgtt ggaagactat ggcgagtccc actttacggt gaaccagcaa cccttcctct      300
acttccaagt cctgttcctg acagcgcagt ttgaagcagc agttgccttt cttttccgca      360
tggagcggct gcgctgccat gctgtccatg tagcactggt gctgtttgag ctgaagctgc      420
ttttaaagtc ctctggacag agtgctcagc tcctcagcca cgagcctggt gaccctcctt      480
gcttgcggcg gctgaacttc gtgcggctcc tcatgctgta cctcggccgc gaccacgcta      540
agggcgaatt ccagcacact ggcggccgtt actagtggat ccgagctcgg taccaagctt      600
ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca      660
caacatacga gccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact      720
cacattaatt gcgttgcgct cactgcccgc ttttcaatcg ggaaacctgt cgtgccagct      780
gcattaatga atcggncaac gccccgggan aagcggtttg cgtattt                   827
```

<210> 218
<211> 498
<212> DNA
<213> Homo Sapien

<400> 218
```
cacttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtactttttt tttttttttt      120
taattcccac aacaacccat ttcaaaatga gaaaactagg ttgagtgact tgtccacagt      180
```

```
tccaaagcta ataaaaatga tgaggcatat ttctcttctg ggcccactgt attcagttct     240
ttgttcttta cactgagtgc cgaaaaaaaa aaatcagact attttgattc tagaaagtga     300
gataattgaa aatgttaaca tatttctcca aaactgatca gactgtggag tctgtcactt     360
ttttggtata ataaaggagt ttgaagaaac aaatgacatc attcctgatg atggtagccc     420
actccaacaa aggcgtatat atgtaggcaa gtttgaagat atctataaga gcattaaaag     480
gcaagtgcac cattgtgg                                                   498
```

<210> 219
<211> 818
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(818)
<223> n = A,T,C or G

<400> 219

```
ggcctntnga gctgctcgac ggccgccatg tgatggatat ctgcagaatt cgcccttagc      60
gtggcgcggc cgaggtacct agaaaacaga aacttgagta gacatggtaa tgaccagaaa     120
aggctatctt tatacatttc ttttgctacg cttcaaattc atgtcaccta aaagttgtga     180
agtgcacaaa acaaatctac ttaactgaaa attattttca atgaatggga tgtttagaac     240
tctgtgaggg tttttaaggt cttttcgaat agcaaattct aatgaggctt ttttaagttg     300
gcaatttaaa ctcatacaag aaataaaaac tcaccagtgt ggctgggcag aatatatata     360
ttttctcaaa tattgtttgt ttgtttttc cctgcactgt atccatggtc ccatgatgaa      420
actgttatat tgctgatata tttattggaa tatgtgggcc aacttccttt ccactcaaca     480
tatggattgg tagtttaaaa taattccttt ctattaagca aatgtgtggc taaggcacat     540
ttaaatagcc cattaaacca atgagatgac aatgtgttac cctcagagaa agcttaattt     600
ttggagtaat caattacaca tatcacagaa tgtctcatga gaacattttt ggctaggtct     660
accaatttat catgcaaata attatagatt ttcatttgag gcaaagatgc tgattcatca     720
ttagtaacat ggtcacaaat aatcatttat tttattttgg taacatctgt ctttcctgtg     780
gggaaactta ctatatgctc tacgttaatt aaattaaa                             818
```

<210> 220
<211> 497
<212> DNA
<213> Homo Sapien

<400> 220

```
cacttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacagccat gaaattgttg     120
ctactcatag aaagtcttag tatagtttgg tttaaacatt ttaaaattgc aaataaatat     180
agatagataa tatcatgatg agaaggtcac gggaagcctg gagatttcag ggtgctcttt     240
cataattgga gcgagaatca tgtaacagtt aagaaactaa actcttgagc cttcatagtc     300
tttgctttct ccccatttat ttatctgata ttatataccc tctttaatta tagactggac     360
tgaaatattt tatttttgtt ttattataaa aaatcctact cgtctttaac atgttctctt     420
aaagagtgtt tcatatataa atactttccc cccaaaatat aaagaggcta accactatag     480
tattgaaaga ttgaaag                                                    497
```

<210> 221
<211> 831
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(831)
<223> n = A,T,C or G

<400> 221

```
cnnnannggg cctntanagc atgctcgacg gccgccatgt gatggatatc tgcagaattc      60
gcccttagcg tggtcgcggc cgaggtacaa tgaaagtatg agctacctct ctgaagtctg     120
```

```
gaaaccttga gagtattaag gttacatgca taaaatcttt aaaatggaag tgtcattaca     180
tggtaaacca attcaaatta aaaataatct catgctgtga aagcaaaata tataactggt     240
ttacccattc ataggtaatt gcacgtcttt gttacatctc aatagtttct ttgtatttgt     300
tgcaatcacc ctccttcttc tcaacactct tttctacctc catgtaactg ctgttgtgaa     360
ttctttataa tattctcatc aatgtttaaa gatgaagttt aaagtgctta caaaggaagc     420
attttaactc ctcttagaac tgagccttta aatttggttt tagacaccct aggtctttct     480
ttcaatcttt caatactata gtggttagcc tctttatatt ttggggggaa agtatttata     540
tatgaaacac tctttaagag aacatgttaa agacgagtag gattttttat aataaaacaa     600
aaataaaata tttcagtcca gtctataatt aaagagggta tataatatca gataaataaa     660
tggggagaaa gcaaagacta tgaaggctca agagtttagt ttcttaactg gtacatgatt     720
ctcgctncaa ttatgaaaga gcaccctgaa atctncangc ttnccgtgac cttctcatca     780
tgatattatc tatctatatt tattgcaatt ttaaaatggt taaaccaaac n              831
```

<210> 222
<211> 497
<212> DNA
<213> Homo Sapien

<400> 222

```
cacttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actctttctc tcccctcctc     120
tgaatttaat tctttcaact tgcaatttgc aaggattaca catttcactg tgatgtatat     180
tgtgttgcaa aaaaaaagtg tctttgttta aaattacttg gtttgtgaat ccatcttgct     240
ttttccccat tggaactagt cattaaccca tctctgaact ggtagaaaaa catctgaaga     300
gctagtctat cggcatctga caggtgaatt ggatggttct cagaaccatt tcacccagac     360
agcctgtttc catcctgttt aataaattag tttgggttct ctacatgcat aacaaaccct     420
gctccaatct gtcacataaa agtctgtgac ttgaagttta gtcagcaccc ccaccaaact     480
ttatttttct atgtgtt                                                    497
```

<210> 223
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 223

```
gggcctnaga gctgctcgnc ggccgccatg tgatggatat ctgcagaatt cgcccttcga      60
gcggccgccc gggcaggtac tttattttca aaaaactcat atgtcgcaaa aaacacatag     120
aaaaataaag tttggtgggg gtgctgacta aacttcaagt cacagacttt tatgtgacag     180
attggagcag ggtttgttat gcatgtagag aacccaaact aatttattaa acaggatgga     240
aacaggctgt ctgggtgaaa tggttctgag aaccatccaa ttcacctgtc agatgccgat     300
agactagctc ttcagatgtt tttctaccag ttcagagatg ggttaatgac tagttccaat     360
ggggaaaaag caagatggat tcacaaacca agtaatttta aacaaagaca cttttttttt     420
gcaacacaat atacatcaca gtgaaatgtg taatccttgc aaattgcaag ttgaaagaat     480
taaattcaga ggagggggaga gaaagagtac ctcggccgcg accacgctaa gggcgaattc   540
cagcacactg gcggccgtta ctagtggatc cgagctcggt accaagcttg gcgtaatcat     600
ggtcatagct gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag     660
ccggaagcat aaagtgtaaa gcctggggtg cctaatgagt gagctaactc acattaattg     720
cgttgcgctc actggccgct ttcagtcng gaaacctgtc gtgccagctg cattaatgaa     780
tcggccaacg cgccgggaga ngcngnttgc gtattgggcc cn                        822
```

<210> 224
<211> 494
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(494)
<223> n = A,T,C or G

<400> 224
cncttgacnt gattacgcca agcttggtac cgagctcgga tccctagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta cttttttttt tttttttaac 120
caactcaata tgtgtttgat gatagtgaat tgataaaacc cgaagctttt ccctgtaaat 180
cttacatctt tgcctttaaa gaatgggtta caaccatcac tagatcacag tagtgcctaa 240
tgaaggttga gaaccgtagg agaggctctc atgctgtaaa taatgttgca ggctaataac 300
ctttcatcac ttcctttgtg cgcttcctgc cttaagtgac aagtagcaac atggcttggg 360
tcccctgtgc agcatcagct tatgctgcca caagtcagtt tgcaccctag gtgcccagga 420
gctagtatcc ttagatcttt ctatcgctaa cttaattctc ttcgttattt atctgaccct 480
ctaactccat gtct 494

<210> 225
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 225
gggccttnga gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgcccttcg 60
agcggccgcc cgggcaggta ctttaatttt gcttgttcaa atgatctaca cttacatttt 120
gcaaatcttt ttttttaaat tttttaaatt ttatattttt tttccagcca actcaaggcc 180
aaaaaaaatt tcttaatata gttattatgc gaggggaggg gaagcaaagg agcacaggta 240
gtccacagaa taagacacaa gaaacctcaa gctgtgaggt caatttgtaa ttaaaagaat 300
actaagatta gatgaacaca acactcagaa atactctagg agagctgaaa aagaaggaac 360
agatgttaac aaaacaaatt aaggctgctg gggaacctga gtccatgtta agcttgggtt 420
gactgtaaag aatttttttt tttaatgcaa gttagacatg gagttagagg gtcagataaa 480
taacgaagag aattaagtta gcgatagaaa gatctaagga tactagctcc tgggcaccta 540
gggtgcaaac tgacttgtgg cagcataagc tgatgctgca caggggaccc aagccatgtt 600
gctacttgtc acttaaggca ggaagcgcac aaaggaagtg atgaaaggtt attagcctgc 660
acattattta cagcatgaga gcctctccta cggttctcaa ccttcattag gcctactgtg 720
atctantgat ggntgtaccc attctttaaa ggcaaagatg taaggattta cagggaaaag 780
cttcgggttt tatcaattca ctatcatcaa acacatattg ng 822

<210> 226
<211> 498
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(498)
<223> n = A,T,C or G

<400> 226
anntaaacta tgacctgatt acgccaactt ggtaccgagc tcggatccac tagtaacggc 60
cgccagtgtg ctggaattcg ccctttcgag cggccgcccg ggcaggtacc ctctcatata 120
tgcaaacaaa tgcagactag gcctcaggca gagactaaag gacatctctt ggggtgtcct 180
gaagtgattt ggacccctga gggcagacac ctaagtagga atcccagtgg gaagcaaagc 240
cataaggaag cccaggattc cttgtgatca ggaagtgggc caggaaggtc tgttccagct 300
cacatctnat ctgcatgcag cacggaccgg atgcgcccac tgggtcttgg cttccctccc 360
atcttctcaa gcagtgtcct tgttgagcca tttgcatcct tggctccagg tggctccctc 420
agtctggact ctaccacttg ggtctccaga ttttctgtta cgtccttgtg ggtcaggata 480
tttctggaag tcactccg 498

<210> 227

<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 227
gggcctctna agctgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac attgatgggc tggagagcag ggtggcagcc tgttctgcac 120
agaaccaaga attacagaaa aaagtccagg agctggagag gcacaacatc tccttggtag 180
ctcagctccg ccagctgcag acgctaattg ctcaaacttc caacaaagct gcccagacca 240
gcacttgtgt tttgattctt ctttttcccc tggctctcat catcctgccc agcttcagtc 300
cattccagag tcgaccagaa gctgggtctg aggattacca gcctcacgga gtgacttcca 360
gaaatatcct gacccacaag gacgtaacag aaaatctgga gacccaagtg gtagagtcca 420
gactgaggga gccacctgga gccaaggatg caaatggctc aacaaggaca ctgcttgaga 480
agatgggagg gaagccaaga cccagtgggc gcatccggtc cgtgctgcat gcagatgaga 540
tgtgagctgg aacagacctt cctggcccac ttctgatcac aaggaatcct gggcttcctt 600
atggctttgc ttccactggg attcctactt aggtgtctgc cctcaggggt ccaaatcact 660
tcaggacacc ccaagagatg tcctttagtc tctgctgagg cctantctgc atttggttgc 720
atatatgaaa aggtacctgc ccgggccggc cgttcnaang gcgaatttca gcacactggc 780
ggncgntact agtggatccc aactcggtac caagc 815

<210> 228
<211> 512
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(512)
<223> n = A,T,C or G

<400> 228
annnnntttn acctannact atgacctgat tacgccaact tggtaccgag ctcggatcca 60
ctagtaacgg ccgccagtgt gctggaattc gccctttcga gcggccgccc gggcaggtac 120
taggtttgca aaaccaatag catgcacatg tgttgggctg aggttcatgt gtcagagact 180
cagttgtaga aggaactttg aatctggcag gcacttaact gtggctgctc agaactaatg 240
tatctggggc tgcttgagca ggggctgagg tcagaggcag ggagtgagct ctccatcatc 300
cttgactcag acccagctcc gcaggagctc catggtcatc cctggagctc atgtggagtg 360
caaggtccgg gagtgggggc gctgacagaa acaaatctgg ggggatcagc cagggtcagc 420
aggggacaga gatcatgtct tttagaagaa tgtgggcttc ctgacctata gaagggcagc 480
tgttcacccc ctgcagatga tagcagggat ng 512

<210> 229
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 229
gggcctnaga gcatgctcga cggccgccat gtgatggata tctgcagaat tcgcccttag 60
cgtggtcgcg gccgaggtac tttttttttt tttttttttt ttcagagata ggttcttact 120
atgctgccct ggctggagtg cagtggcttt cttaggggca atcacagctc actgcagcct 180
ggaactcctg ggctcagcct cctaagtagt tgagactacc aatgcacgcc accatacctg 240
gccttagata ccccctgtat cctggaactc actccttata agagacactg aatgtggaag 300

tcttcgcaga tattaagggc actgcccagt tcctgtcttt gaattattgg gccaacaaca 360
gaaaggcgct cctgaggccc cagatcatcc ctgctatcat ctgcaggggg tgaacagctg 420
cccttctata ggtcaggaag cccacattct tctaaaagac atgatctctg tcccctgctg 480
accctggctg atccccccag atttgtttct gtcagcgccc ccactcccgg accttgcact 540
ccacatgagc tccagggatg accatggagc tcctgcggag ctgggtctga gtcaaggatg 600
atggagagct cactccctgc ctntgacctc agcccctgct caagcagccc cagatacatt 660
agttctgagc agcccagtta agtgcctgcc agattcaaag ttccttctac aactgagtct 720
ctgacacatg aaccttaagc ccaacacatg tgcatgctat tgggttttgc aaacctagta 780
cctgnccggg cgggccgttc gaaanggcga attct 815

<210> 230
<211> 502
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 230
tnnanctana cttgacctga ttacgccaac ttggtaccga gctcggatcc actagtaacg 60
gccgccagtg tgctggaatt cgccctttcg agcggccgcc cgggcaggta cacagagatg 120
cggtccagct gcaggtcgct gtccccgtgg taggtgccgg tggggtcgat gccatgttca 180
tcactgatca cctcccagaa cttggcaccg atctggtagc cacactgacc agcctggatg 240
tgcacgattt ccctcatggt taaaatttaa ttttttgct cgcctcaagg tatgtatggg 300
gcaagaaaat aagtaatttt ttttctccgc aggtcgcagg ctggaaggtt ggaatgcgcc 360
ccagaggctg gagcagcgag gtgcaaacgc gacggcagga aggttctgag agccccgcgt 420
acctcggccg cgaccacgct aagggcgaat tctgcagata tccatcacac tgcggccgct 480
cgagcatgca tctagagggc cc 502

<210> 231
<211> 817
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(817)
<223> n = A,T,C or G

<400> 231
nngggcctct nnagctgctc gacggccgcc atgtgatgga tatctgcaga attcgccctt 60
agcgtggtcg cggccgaggt acgcggggct ctcagaacct tcctgccgtc gcgtttgcac 120
ctcgctgctc cagcctctgg ggcgcattcc aaccttccag cctgcgacct gcggagaaaa 180
aaaattactt attttcttgc cccatacata ccttgaggcg agcaaaaaaa ttaaatttta 240
accatgaggg aaatcgtgca catccaggct ggtcagtgtg gctaccagat cggtgccaag 300
ttctgggagg tgatcagtga tgaacatggc atcgacccca ccggcaccta ccacggggac 360
agcgacctgc agctggaccg catctctgtg tacctgcccg ggcggccgct cgaaagggcg 420
aattccagca cactggcggc cgttactagt ggatccgagc tcggtaccaa gcttggcgta 480
atcatggtca tagctgtttc ctgtgtgaaa ttgttatccg ctcacaattc cacacaacat 540
acgagccgga agcataaagt gtaaagcctg gggtgcctaa tgagtgagct aactcacatt 600
aattgcgttg cgctcactgc ccgctttcca gtcgggaaac ctgtcgtgcc agctgcatta 660
atgaatcggc caacgcgcgg ggagaggcng nttgcgtatt gggcgctctt ccgcttnctc 720
gctcacttga ctcgcttgcg ctcggtcgtt cngcttgcgg cnanccggat tcagcttact 780
taaaggcggt aataccggtt atccaccaga attangg 817

<210> 232
<211> 481
<212> DNA
<213> Homo Sapien

<400> 232
```
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca      60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtacaaattt gttgtgtttt     120
ttatgttcta ataatactga gacttctagg tcttaggtta atttttagga agatcttgca     180
tgccatcagg agtaaatttt attgtggttc ttaatctgaa gttttcaagc tctgaaattc     240
ataatccgca gtgtcagatt acgtagagga agatcttaca acattccatg tcaaatctgt     300
taccatttat tggcatttag ttttcattta agaattgaac ataattattt ttattgtagc     360
tatatagcat gtcagattaa atcatttaca acaaaagggg tgtgaaccta agactattta     420
aatgtcttat gagaaaattt cataaagcca ttctcttgtc attcaggtcc agaaacaaat     480
t                                                                      481
```

<210> 233
<211> 809
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(809)
<223> n = A,T,C or G

<400> 233
```
gggcctctnn agcatgctcg acggccgcca tgtgatggat atctgcagaa ttcgccctta      60
gcgtggtcgc ggccgaggta caaaagatac tgttcacccc attagagaac tgatttgaag     120
ttactcttcc ctgtgagggc tctgtcatct taactgtatt cacatacttt caactgttcc     180
ccttgctgct aacctcaggt tctttagttc atctatctgg cagagctgat ttggggaaaa     240
caagacaaac cttgtcaggt tttcttaata aataagcagt tgtcatgttt caagagtttt     300
agaaatgagc aataatcaag gaagaggaca acgattgcat acgtttataa tatttagaac     360
atcttttgcc acaataaaca ctggaaacca cccacttgtg gacaccaaac atttggattt     420
gtatattttg tggcattccc tcactctaat cctctcatcc ttaaaaattt tcagaaattt     480
ttgcagcaac aaacactgat tgcaacatat gatttagggt agatttatga accatttttt     540
cactgaaata catcaacagg agtgagtagt ctgagtgacc accccagcat ggagaaaact     600
gtagtttaca gattcttctg gagcattttt atttctagat tgcagtggaa gtctaacccc     660
ccttggagat gtctgcctta aagggtcttt ggccagggtc ctctgtagag ccatagtcca     720
gatctactct atttgngtgc tccttacaac atcagaacag caactctcaa tccggatcat     780
cccagaatgc cgctgagtca cagcgtggg                                       809
```

<210> 234
<211> 482
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 234
```
actatgacca tgattacgcc aagcttggta ccgagctcgg atccactagt aacggccgcc      60
agtgtgctgg aattcgccct tcgagcggcc gcccgggcag gtactgaaaa gaagatagtg     120
ccatttgaaa caacagatgc atcttttata cattttcaca agttngtttt tcatattttt     180
aaaggcccca tttatctgta acagtggtat ttttatttag agtatcggct acttaatata     240
tacatgcaac aatatatgct ttaatagtca tttaactttt angaatattt catnacatta     300
agtggttaag catagcgtta aaagagtgga atataaggaa tannaanntn tngaaaatac     360
gctgctannt tcattngcan actatagtag aatggagatg cccataaaag tgatcattgc     420
ccaactgaat tcctacccng aactaacatg tgattctcaa gtgggganaa atattattaa     480
aa                                                                     482
```

<210> 235
<211> 474
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 235
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta cattacttgg tgttaacatt 120
gttggcagtg gtagcccctt ttcagaaagc aacttgctgt aagtcagggt gtccgttcca 180
accttcagct agtgaaaagg tagtaacaaa tggtaaacaa gagaatgatt gtttaaacct 240
atctgtggac acttaatgca actgtttaaa aatgataatc acgagttatg tagcaacgtg 300
gaaatatatt tacagaacat taatggagaa gcagggacac gaagtatatt atactacagt 360
tataactcaa cagtcattat atgccggtca tttaccagtc atttaaccag ttcattataa 420
ctgtttaaaa atatatatgc ttatagtcaa aagctgttgt ggtgttgttg ttgn 474

<210> 236
<211> 819
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(819)
<223> n = A,T,C or G

<400> 236
gggccttnna gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt actttttttt tttttttttt tttttatttt taactttatt 120
tttattgntg acactattac agatagaatg accacaacca tattaacaaa ccaaaaacct 180
gtgcacagaa acaagatgaa gaaaatatat caagatgtta aacacactct ttggatggtg 240
aaaacatggg tgagtttctc ttctacattt ctgtaacttc aaagtttcta taatgaacac 300
atttcatata taatggaaat atatgtagta aaggtggact accaaaacac tagaatgatg 360
acctttcaag gaaaccgaaa caaaataacc ataatcccac aacaaccaca caactatttc 420
ttgnttttca tctttcttcc catctttgac atttatgcat acttatcact aacaccctaa 480
taatcacaga ctagtgcaca gatcaagatg ttaacagtta attgttgttg ggtgttggga 540
atatgtgtga attttcttta ctgaatttcc aaagttttgt atgagtatgt attatatttg 600
taatggaaaa tacatacata aaatttatta ccaaaacacc aaagattatt taagggaatt 660
tgagacaaaa tatttaacca aattccccaca atgacaacac tattttagtt attttccaca 720
tcttttcatt taagacttta tgcacacata tttaacactg gtatcacaag cgtgggcact 780
gaaacaagga tnganggaac nggatcagga tgttagccg 819

<210> 237
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 237
agcttgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actaagctca gcatgtctca 120
tggtcaatta ctgcgtattt ccaaaaaatg tgttgtttgg tcttgagaaa attctttagc 180
cccttgacac cagaattatc tccactgtag aaaaaataga caattatagt ctaacaggta 240
aatcacaaaa attcttcagc cacacttcct gggttcaaat gtggtttttc tactcagtaa 300
tattgtaacc ctgggcaagt tatttaactt gtctaagtct cagtttctcc atctgtaaaa 360
tgaggataat cacaatatct actacataat gttcttctga agatgtaatg agataatcca 420
tgtnaaatat tcanacagca cataggaatg ggtcatttaa tgtttatcat tacttgccta 480
ttt 483

<210> 238
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 238
gggcccntnn agctgctcgn cggccgccag tgtgatggat atctgcagaa ttcgcccttt 60
cgagcggccg cccgggcagg taccattatt tttcattcaa taccatatgt ctgaaaaata 120
ggcaagtaat gataaacatt aaatgaccca ttcctatgtg ctgtctgaat atttacatg 180
gattatctca ttacatcttc agaagaacat tatgtagtag atattgtgat tatcctcatt 240
ttacagatgg agaaactgag acttagacaa gttaaataac ttgcccaggg ttacaatatt 300
actgagtaga aaaaccacat ttgaacccag gaagtgtggc tgaagaattt ttgtgattta 360
cctgttagac tataattgtc tattttttct acagtggaga taattctggt gtcaaggggc 420
taaagaattt tctcaagacc aaacaacaca ttttttggaa atacgcagta attgaccatg 480
agacatgctg agcttagtac ctcggccgcg accacgctaa gggcgaattc cagcacactg 540
gcggccgtta ctagtggatc cgagctcggt accaagcttg gcgtaatcat ggtcatagct 600
gtttcctgtg tgaaattgtt atccgctcac aattccacac aacatacgag ccggaagcat 660
aaagtgtaaa gcctggggtg cctaatgagt gagctaactc acattaattg cgttgcgctc 720
actgnccgct ttccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggncaacg 780
cgccggggag aggcngnttg cgtattgggc gctct 815

<210> 239
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 239
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt acttttttttt tttttttttt 120
ttttttttta gcgagcaagt atggnttatt acggacaaat ggtagaaaaa tgttactaat 180
atccatagat aagttcctta agtcatgtag agagactgtt attaaaagtt tgctgcattt 240
ttctattgaa tcaagaacta gctaccagtt acagtgcctt ctaaacacac agttagcttt 300
gctttatcaa taaccaaata ataaactagg tcccaatggt tttgtccaca tntagattgt 360
tcaggtgatc aggaactctt ttatttgtgt gctttagctt ttagttcttg gttatatctc 420
caaatacgaa aaagctgaga ggctcctact gcccccacaa agaaattaac agcaaacaga 480
ctt 483

<210> 240
<211> 815
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 240
gggcctntna gctgctcgac ggccgccatg tgatggatat ctgcagaatt cgccctttcg 60
agcggccgcc cgggcaggta caaccatcca gcaggtccca gaacagtttt cttctgggct 120
ccaattatga aatgggggtt ggtgtgtgct ggattggctg atatggccag acctgcagaa 180

aaacttagca cagctcaatc tgctgttttg atggctacag ggtttatttg gtcaagatac 240
tcacttgtaa ttattccaaa aaattggagt ctgtttgctg ttaatttctt tgtgggggca 300
gtaggagcct ctcagctttt tcgtatttgg agatataacc aagaactaaa agctaaagca 360
cacaaataaa agagttcctg atcacctgaa caatctagat gtggacaaaa ccattgggac 420
ctagtttatt atttggttat tgataaagca aagctaactg tgtgtttaga aggcactgta 480
actggtagct agttcttgat tcaatagaaa aatgcagcaa acttttaata acagtctctc 540
tacatgactt aaggaactta tctatggata ttagtaacat ttttctacca tttgtccgta 600
ataaaccata cttgctcgct aaaaaaaaaa aannnnnaaa aaaaaaagta cctcggccgc 660
gaccacgcta agggcgaatt ccagcacact ggcggccgtt actagtggat ccgagctcgg 720
taccaagctt ggcgtaatca tgggtcatag ctggttcctg tgtgaaatgg tatccgntca 780
caattncaca caacatacga accggaagcc ttaag 815

<210> 241
<211> 486
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(486)
<223> n = A,T,C or G

<400> 241
agctatgacc atgattacgc caagcttggt accgagctcg gatccactag taacggccgc 60
cagtgtgctg gaattcgccc ttagcggccg cccgggcagg tacttcccac cactggaaat 120
gttagcataa aagaacttgg agaggaaaaa agtattaaca aaactgcagt ctgcactctt 180
taaacctgtt taaggctctt catcctggtt agcaaaaggt gtgaatgtaa tgtgatggaa 240
tttaaaagtt ttatgagacc aggcacagtg gctcacgact gtaattccag cagtttagga 300
agccgaagtg tgcagatcac ctgaggtccg gagaccagcc tggccaacat ggtgaaaccc 360
tgtctctact agaaatacaa aaattagcca ggtgtggtgg cgggcgcctg taatcccaac 420
tactcaggag gctgaggcta gagaatcact tgaacccagc angcggaggt tgcggtgagt 480
cganat 486

<210> 242
<211> 481
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

<400> 242
anttgacctg attacgccaa gcttggtacc gagctcggat ccctagtaac ggccgccagt 60
gtgctggaat tcgcccttcg agcggccgcc cgggcaggta catcagtgtt cattttatta 120
tttcttacac tgtcttcatg acttacacat aatattttgc tagttttaaa acataagatg 180
tgataataat ctaaacagac caaaggaaat aaatgaatat gattaaaaaa agacagagaa 240
taagccctgt ctgatggaaa gcataacaaa gcaggtagaa caactgtcag gaatgcttga 300
tccaataaag ctaggtttgt gatccacaac acttcagcat tttaatgtga tttttgatgt 360
tngcttttttg caatggtgat tctcagttgc ctccctcctg tgtctttaca agctgaaatc 420
aagtgaagct acttctgact ttttctaaaa cttaaaccca acatgaaggt ctgcgtattc 480
t 481

<210> 243
<211> 824
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(824)

<223> n = A,T,C or G

<400> 243
cnannggggcc tntnnagcat gctcgacggc cgccatgtga tggatatctg cagaattcgc 60
ccttagcgtg gtcgcggccg aggtacataa tactttagat aaacattttt agaataactt 120
tattataact cgataagcaa aataatccaa acctttatac atttctacaa ggatagtcac 180
atatgtcaat ttttcggttt cctctcgtgc ctattttgtc tcctgagccg gcccctttcc 240
agctgacacg tgtgctccgt gttctcccac aatagtgtga cctggcctga gtccatgccg 300
ccgtgagcct cctttctgtg cttacaacag cagcctgcct gatgtcagtt atggactatt 360
ctttctttca gcctcatttc aggtcctct gcctcttaga gctgctgctg tagcttagct 420
agagacccgc tgctgttgca tcatggaaaa gtgccacata cgtgcacatg tgaaagaata 480
cgcagacctt catgttgggt ttaagtttta gaaaaagtca gaagtagctt cacttgattt 540
cagcttgtaa agacacagga gggaggcaac tgagaatcac cattgcaaaa agcaaacatc 600
aaaaatcaca ttaaaatgct gaagtgttgt ggatcacaaa cctagcttta ttggatcaag 660
cattcctgac agttgttcta cctgcttttg ttatgctttc catcagacag ggcttattct 720
ctgtcttttt taatcatatt catttatttc ctttggtctg tttagattat tatcacatct 780
tatgttttaa aactagcaaa atattatgtg taagtcatga agnt 824

<210> 244
<211> 483
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(483)
<223> n = A,T,C or G

<400> 244
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggcccgcc 60
agtgtgctgg aattcgccct ttcgagcggc cgcccgggca ggtacgcggg ggcagggtgt 120
ttaatcgtcg ccaagcggga cttactgcaa gctatcaaat ctgaggtctt attttgttga 180
gtcgaaagtg aaatttttcct ttggccaacg tgacagggct ttgtttggtg gtaaaaaggg 240
ttactagaca cccctcattc cactgccact ggagggcgca tttctcagct cttgctcttc 300
aaacctgctg aaaggaattc ctagatctaa acaccagcat ttgacattgt gcagcaaana 360
aatggttatg ganaagccca gtccgctgct tgtanggcgg gagtttgtga ggcaatatta 420
tactttgctg aataaagctc cggaatattt acacaggttt tatggcagga attcttccta 480
tgt 483

<210> 245
<211> 822
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(822)
<223> n = A,T,C or G

<400> 245
ttgggcccnt nnagcatgct cgacggccgc catgtgatgg atatctgcag aattcgccct 60
tagcgtggtc gcggccgagg tacttcccct cgaaacataa tcggttttgc aattaagatt 120
ctctgaactg gttcagagtc atcaaaaacc acaaaaccaa aatttggaag ctttccccca 180
acacccttgg tattgatgcg aagttccaca acgtttccaa aactcatgaa gaattccttt 240
agctcatttt catcaatatc atgtggcaag ttaccaacaa aaagttgatg actatctgga 300
tagcgaatta ttctacggtt gtcagagtca ttctgttcca tatctcctct gcctggtctt 360
ggtcctctag gaggaaaacc aggtcgttct ctaggtcgtt gttcacgcac acgaggtggc 420
tgagattgaa cttctggttt agcttcgact cttggctttg gtggttcttg tggcagagaa 480
acaggttctg ccggaggagg agtagtagat ttctcctcta gttcttctaa gttcttctcc 540
tccacttgtg gtttcagctc ttcagtcttt gtttcagatt ctggctcagg ttcaggttca 600
tgagaggatt cttccaaagg ctcctctatg ccattagtca cagggtgagc ttcatagtaa 660
ccactgttag cattttcttg cacaggttca ggagatggtt gnctttcttc ttggtcctct 720

tctacttcat cttctgattc ttcatcaaag ttcangctca gaatcaccaa acacttnatc 780
ttcataacga aacatatcat tgtgaacata aaatttattt gg 822

<210> 246
<211> 482
<212> DNA
<213> Homo Sapien

<400> 246
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt agcgtggtcg cggccgaggt actttttttt tttttttttt 120
aaccaactca atatgtgttt gatgatagtg aattgataaa acccgaagct tttccctgta 180
aatcttacat ctttgccttt aaagaatggg ttacaaccat cactagatca cagtagtgcc 240
taatgaaggt tgagaaccgt aggagaggct ctcatgctgt aaataatgtt gcaggctaat 300
aacctttcat cacttccttt gtgcgcttcc tgccttaagt gacaagtagc aacatggctt 360
gggtcccctg tgcagcatca gcttatgctg ccacaagtca gtttgcaccc taggtgccca 420
ggagctagta tccttagatc tttctatcgc taacttaatt ctcttcgtta tttatctgac 480
cc 482

<210> 247
<211> 816
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(816)
<223> n = A,T,C or G

<400> 247
gggccttnga gctgctcgan cggccgccat gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccgggcaggt actttaattt tgcttgttca aatgatctac acttacattt 120
tgcaaatctt tttttaaat tttttaaatt ttatattttt tttccagcca actcaaggcc 180
aaaaaaaatt tcttaatata gttattatgc gaggggaggg gaagcaaagg agcacaggta 240
gtccacagaa taagacacaa gaaacctcaa gctgtgaggt caatttgtaa ttaaaagaat 300
actaagatta gatgaacaca acactcagaa atactctagg agggctgaaa aagaaggaac 360
agatgttaac aaaacaaatt aaggctgctg gggaacctga gtccatgtta agcttgggtt 420
gactgtaaag aatttttttt tttttaatgc aagttagaca tggagttaga gggtcagata 480
aataacgaag agaattaagt tagcgataga aagatctaag gatactagct cctgggcacc 540
tagggtgcaa actgacttgt ggcagcataa gctgatgctg cacaggggac ccaagccatg 600
ttgctacttg tcacttaagg caggaagcgc acaaaggaag tgatgaaagg ttattagcct 660
gcaacattat ttacagcatg agagcctctc ctacgggtct caaccttcat taggcactac 720
tgngatctag tgatggttgt acccattctt taaaggcaaa gatgtaagat ttacagggaa 780
aagcttcggg ttttatcaat cctatcatca acacng 816

<210> 248
<211> 482
<212> DNA
<213> Homo Sapien

<400> 248
actatgacct gattacgcca agcttggtac cgagctcgga tccactagta acggccgcca 60
gtgtgctgga attcgccctt tcgagcggcc gcccgggcag gtactctttg ggcattaatg 120
ccttctctgt aattatatct cgtttttgct tggcagtgac ctacccagta attgcatcgt 180
gtattgccat gaaaggtaaa cacattgtga actgaactta ccaagcagat tctgtgagaa 240
agcactggtt ggggctgaac actgttgaca catcattttt attggaagag tattaactgg 300
tgcctcttct gaaacacacc aacccatatt cctctgctcc cccaaagctg tttctgatcc 360
tgctgggagc aactaactag ttattatgca catctgctcc agacccagct ctttaacttc 420
atggttttac agcttgtttt ttctttttct tttcttttct tttttttaa aaaagcacct 480
tt 482

<210> 249

<211> 821
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(821)
<223> n = A,T,C or G

<400> 249
ggcctctnag ctgctcgacg gccgccatgt gatggatatc tgcagaattc gcccttagcg 60
tggtcgcggc cgaggtactt tatgaatttg gggtaggtaa agtttgtatt ttatcttaaa 120
catgttttct atgatgaaaa ggaacaaaat tgtaaaaaat gaggatcttc cctctaaagg 180
tttcaaagcg ttagaggaca tgcaattaaa tgttgttaca ccttgaacaa tgagcctctt 240
gagtttgtag gaagggcaga ccggctccat taccaacaac tttggggtag aaagcacagc 300
tctcctcttt tacccagcac aaatgcaatc ctgattataa aactatttgt gtttctaaat 360
acaaccaaag gaaatcttag agaaacataa attagaaacc tcttttatta aggggaaaca 420
acaaaaaaag gtgctttttt aaaaaaaaag aaaagaaaag aaaaagaaaa aacaagctgt 480
aaaaccatga agttaaagag ctgggtctgg agcagatgtg cataataact agttagttgc 540
tcccagcagg atcagaaaca gctttggggg agcagaggaa tatgggttgg tgtgtttcag 600
aagaggcacc agttaatact cttccaataa aaatgatgtg tcaacagtgt tcagccccaa 660
ccagtgcttt ctcacagaat ctgcttggta agttcagttc acaatgtgtt tacctttcat 720
ggcaatacac gatgcaatta ctgggtaggt cactgccaag caaaaaccga agatntaatt 780
tcccgagaag gcattaatgc ccaaagagta cctgccccgg n 821

<210> 250
<211> 481
<212> DNA
<213> Homo Sapien

<400> 250
acttgacctg attacgccaa gcttggtacc gagctcggat ccactagtaa cggccgccag 60
tgtgctggaa ttcgccctta gcgtggtcgc ggccgaggta caacattgat gttttaatat 120
agaatgaagt gcttgctaca cagtcaagta aatcaacata tccattacca cacacacttt 180
tcttttctga ggagcggtaa gagtacttta attttgcagt tattgattaa ttaaaaaaca 240
cagttgtttt cagcatttcc tagttacagt agtgcatagg aaattccatt ctaaacaaag 300
aagtaattaa tgaaataaca acacacctta acattttaca ttgataggtt acagtttaca 360
aggtgctttc acatacatta tttcatttga ttcttacaac aagcagaaaa aacagtggga 420
aagatttttt ttttcaggct tacaatgagt attttcaggc caatgggcag ttaacacaag 480
g 481

<210> 251
<211> 803
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(803)
<223> n = A,T,C or G

<400> 251
gggccttnna gctgctcgnc ggccgccagt gtgatggata tctgcagaat tcgccctttc 60
gagcggccgc ccggcaggta cactaaatta gaatattttt aaagtatgta acattcccag 120
tttcagccac aatttagcca agaataagat aaaaacttga ataagaagta agtagcataa 180
atcagtattt aacctaaaat tacatatttg aaacagaaga tattatgtta tgctcagtaa 240
ataattaaga gatggcattg tgtaagaagg agccctagac tgaaagtcaa gacatctgaa 300
tttcaggctg gaaaactatc agtatgatct cagcctcagt tctcttgtct gtaaaatgga 360
agaactggat taggcagttt gtaagattcc tcctaacttt cacagtcgat gacaagattg 420
tctttttatc tgatattttg aagggtatat tgctttgaag taagtctcaa taaggcaata 480
tattttaggg catctttctt cttatctctg acagtgttct taaaattatt tgaatatcat 540
aagagccttg gtgtctgtcc taattccttt ctcactcacc gatgctgaat acccagttga 600

atcaaactgt caacctacca aaaacgatat tgtggcttat gggtattgct gtctcattct 660
tggtatattc ttgtgttaac tgcccatggc ctgaaaatac tcattgtaag cctgaaaaaa 720
aaaatctttc ccactggttt ttctgcttgg tgtaagaatc aaatgaaata tggatgtgaa 780
agcccttgta actgtaccta tcn 803

<210> 252
<211> 500
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 252
tacnccaann tttgacctga ttacgccaag cttggtaccg agctcggatc cactagtaac 60
ggccgccagt gtgctggaat tcgcccttag cgtggtcgcg gccgaggtac agatgaaaag 120
aagtggtgtt aatgacctac ctgcaccgat aataaagcaa atagaatgat tatatacatt 180
aagatcagct tgattaaaaa taaattttat atgcaggtaa attgatcatt aaaatgaacc 240
cagtttaact cttctcgtgt gttgttttaa ggtaggccac tgaaacgcag agataaaatc 300
anatggggaa aattaaaagc naagaaaaaa attacaaaac aagtgggtta agccatggat 360
tcttaaccaa accctggact aaatgtgcca aagtgctttg aaaatttcca ctgccagcna 420
tggntggtaa agtcantttg gcaaaaaaaa ggtggttnga aaaaaaactn accttttaaa 480
ttcccacctt ggatctggcn 500

<210> 253
<211> 831
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(831)
<223> n = A,T,C or G

<400> 253
gnnnnnnnnn gnnnnnnnnn ntttnnantg ggcctctnna gcatgctcga cggccgccat 60
gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt actatatttg 120
tgagcctagg gtaggggcac tgctgcaact tctgctttca tcccatgcct catcaatgag 180
gaaagggaac aaagtgtata aaactgccac aattgtattt taattttgag gtatgatatt 240
ttcagatatt tcataatttc taacctctgt tctctcagta aacagaatgt ctgatcgatc 300
atgcagatac aatgttggta tttgagaggt tagttttttt tcctacactt tttttgcca 360
actgacttaa caacattgct gtcaggtgga aatttcaagc acttttgcac atttagttca 420
gtgtttgttg agaatccatg gcttaaccca cttgttttgc tattttttttc tttgctttta 480
attttcccca tctgatttta tctctgcgtt tcagtggcct accttaaaac aacacacgag 540
aagagttaaa ctgggttcat tttaatgatc aatttacctg catataaaat ttatttttaa 600
tcaagctgat cttaatgtat ataatcattc tatttgcttt attatcggtg caggtaggtc 660
attaacacca cttcttttca tctgtacctc ggccgcgacc acgctaaggg cgaattccag 720
cacactggcg gcccgttact agtggatccg agctcggtac caagcttggc gtaatcatgg 780
gtcatagctg tttcctgtgt gaaattggta tccgntcaca attccacan g 831

<210> 254
<211> 514
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(514)
<223> n = A,T,C or G

<400> 254
cacttgacnt gatcgccaac ttggtaccga cntcgnntcc attattaccg gacacttgac 60
tgatacgcca ncttggtacc gactcggacc actagtaacg gncgccagtg tgctggaatt 120
cgcccttgag cggccgcccg ggcaggtacc tctaatgcag gctaataaat ttaagctaat 180
tatttatgct acctgtgctg tggtggtttc ctatcagcag ccaaatataa cctcacagtt 240
gttttgctgt ttttgctttc acaaaagagc tattaaccaa cttaaaaatg tttttgatt 300
gaaggatgct taggggatga gaggatatca acaatataag cccatgccaa atccccattt 360
cttatcatta aaactgacct gacattaaag caatgcttaa ttttttacca taagagtgaa 420
attttgagat tataatttta aagtgtaaaa tatttacact taaattacac ttataatttt 480
aaagtgtata atatttacac agattaaaat aaaa 514

<210> 255
<211> 830
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(830)
<223> n = A,T,C or G

<400> 255
nnnnnngncn nnnnnnannn nnnnnnnant gggcctctnn agcntgctcg acggccgcca 60
tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta cttttttttt 120
ttttccagat gaagtcttgc tctgttgccc aggctggagc gcagtggcac aatctcagct 180
cactgaaacc ttcgcccccct gggctcaagc tagccagtct tttagtaaac atttagtcaa 240
caaatctgca attataacgg aggtttgatt tttgttgttt ttgtttgttt ttaagtcact 300
ctgtgtttgt aatatcaatt tacttttcaa gtttagaatg ttttgcttca ttgtttccca 360
tattttattt taatctgtgt aaatattata cactttaaaa ttataagtgt aatttaagtg 420
taaatatttt acactttaaa attataatct caaaatttca ctcttatggt aaaaaattaa 480
gcattgcttt aatgtcaggt cagttttaat gataagaaat ggggatttgg catgggctta 540
tattgttgat atcctctcat cccctaagca tccttcaatc aaaaaacatt tttaagttgg 600
ttaatagctc ttttgtgaaa gcaaaaacag caaaacaact gtgaggttat atttggctgc 660
tgataggaaa ccaccacagc acaggtagca taaataatta gcttaaattt attagcctgc 720
attagaggta cctgcccggg cnggccgtca agggcgaatt ccagcacact ggcggccgtt 780
ctagtggatc cgactcggtc cagcttgcgt aatcatggtc atagctgttg 830

<210> 256
<211> 524
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(524)
<223> n = A,T,C or G

<400> 256
cnnnnnnnna ncntnanacn nnnnnntngn nnnnnagnnn nnnnnnnnnn nnnnnnnnan 60
actatgactg attacgccan cttggtaccg actcggatcc actagtaacg gccgccagtg 120
tgctggaatt cgcccttagc gtggtcgcgg ccgaggtaca ttacttggtg ttaacattgt 180
tggcagtggt agccccttt cagaaagcaa cttgctgtaa gtcagggtgt ccgttccaac 240
cttcagccag tgaaaaggta gtaacaaatg gtaaacaaga gaatgattgt ttaaacctat 300
ctgtggacac ttaatgcaac tgtttaaaaa tgataatcac gagttatgta gcaacgtgga 360
aatatattta cagaacatta agtggagaaa gcaggacacg aaagtatatt tatactacag 420
ttataactca acagttcatt tatatgctgn tcatttaaca gttcatttaa acagttcatt 480
ataactgttt aaaaatatat atgcttatag tcaaaagctg ttgg 524

<210> 257
<211> 814
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(814)
<223> n = A,T,C or G

<400> 257
ntgggcctct agaagcatgc tcgagcggcc gccagtgtga tggatatctg cagaattcgc 60
ccttgagcgg ccgcccgggc aggtactttt tttttttttt tttttttttt tttgatattt 120
atttttaact ttatttttat tgntgacact attacagata gaatgaccac aaccatatta 180
acaaaccaaa aacctgtgca cagaaacaag atgaagaaaa tatatcaaga tgttaaccac 240
actctttgga tggtgaaaac atgggtgagt ttctcttcta catttctgta acttcaaagt 300
ttctataatg aacacatttc atatataatg gaaatatatg tagtaaaggt ggactaccaa 360
aacactagaa tgatgacctt tcaaggaaac cgaaacaaaa taaccataat cccacaacaa 420
ccacacaact atttcttgct tttcatcttt cttcccatct ttgacattta tgcatactta 480
tcactaacac cctaataatc acagactagt gcacagatca agatgttaac agttaattgt 540
tgttgggtgt tgggaatatg tgtgaatttt ctttactgaa tttccaaagt tttgtatgag 600
tatgtattat atttgtaatg gaaaatacat acataaaatt tattaccaaa acaccaaaga 660
ttatttaagg aatttgagac aaaatattta accaaattcc cacaatgaca acactatttt 720
agttattttc cacatctttt catttaaaga ctttatgcac acatatttaa cactgntatc 780
acaagcgtgt gcactgnaac aggattgagg aaan 814

<210> 258
<211> 474
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 258
acagctatga cctgattacg ccaagcttgg taccgagctc ggatccacta gtaacggccg 60
ccagtgtgct ggaattcgcc cttagcgtgg tcgcggncga ngtacattat ttggaggact 120
taaaatctgn atgtggacat ggtcccaact tantgtccgt taactagtta tccaaattgt 180
aanagctaca gaaagcccag ttgaggggta antgtgcctg gntcacacag cctgcacccct 240
gtcacctcgg caatgagcca gtgtggggca ctggggactt ctaacccttg gattgctctt 300
tttgacctgt gcataccttc taattgnaaa atatatttca gaccgagagt acntgcccgg 360
gcggccnctc aaaagggcga attctgcaaa tatccatcac atggcggccg ntngagcatg 420
catctaggag ggcncaattc ccctatagng agtngtatta caattcactg gcnc 474

<210> 259
<211> 809
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(809)
<223> n = A,T,C or G

<400> 259
ntgggcccnt agangcatgc tcgncggccg ccatgtgatg gatatctgca gaattcgccc 60
tttcgagcgg ccgcccgggc aggtactcac ggtctgaaat atattttaca attagaaggt 120
atgcacaggt caaaaagagc aatccaaggg ttagaagtcc ccagtgcccc acactggctc 180
attgccgagg tgacagggtg caggctgtgt gagccaggca cacttacccc tcaactgggc 240
ttctgtagct ttacaatttg gataactagt tagcggacag tagttgggac atgtcacata 300
cagatttgag tcctccaata atgtacctcg gccgcgacca cgctaagggc gaattccagc 360
acactggcgg ccgttactag tggatccgag ctcggtacca agcttggcgt aatcatggtc 420
atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca tacgagccgg 480
aagcataaag tgtaaagcct ggggtgccta atgagtgagc taactcacat taattgcgtt 540

```
gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg    600
ccaacgcgcg gggagaggcg gtttgcgtat tgggcgctct tccgcttcct cgctcactga    660
ctcgctgcgc tcggtcgttc ggctgcggcg agcggtatca gctactcaaa ggcggtaata    720
ccgttatnca cagaatcang ggatacgcag gaaagaacat gtgagcaaaa ngccacaaaa    780
ggccaggaac cgtaaaaagg ccgcgtttg                                      809

      <210> 260
      <211> 713
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(713)
      <223> n = A,T,C or G

      <400> 260
ctctttaaac gccagctcga ntccganntc tatccntgac aannnnngtn ccggnctgga     60
attcgncctt tcgagcggcc gcccgggcag gtacttgagt tcatgggcat ctctcccgcc    120
gcctctcagc ctatctgcac catgtctcac acgttcagtt gcagctctta ccgttttgaa    180
ggcgcacgtg ggcaagaagt cctgggcagc acaagaaagt caatcacgtt gagacagaga    240
gagcaggaga ggaagtgggc cccagtagaa gtgggcgaga gagcgttggg tgggaacgtg    300
gcacgagaga gagaaattat gagattgaga gagagagaga gagagagaga gagagagaga    360
gaaagagana ganagaggga aaganaaaga gacagagaaa agaaactatt gttggttaaa    420
atgccagcgg aaagtccatg gggtgaatg agtccggcaa tggncangga gttagcagct    480
tggcgtagtg tctttcactg ntttggctgt cttgagaata gcattcnacn ccgactgtgg    540
ttccccanca gactttagnc ngttgcccng ncttgaattg ccggaccaag gttaacatag    600
gcttttcggn tctnaatatt tttggggctn gaatantcgg aaccntttgg gctgggccat    660
ttacccgntn cnncntgggt nnnacatttt tnctggntaa tcccgccttt tng           713

      <210> 261
      <211> 722
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(722)
      <223> n = A,T,C or G

      <400> 261
acgcanttag gtaccgagct cggatcccta gtaacggccg ccagtgtgct ggaattcgcc     60
cttagcgtgg tcgcggcccg aggtactcct cagccatgcc gaaggtcctc ttccgggact    120
cttcgatggc agacagcagg gcattgtcct tctcattctt caggaagccc tgcagctctt    180
aaatttaagg agttacagaa cggtcgatgc tgncgatcac tgcagctctt ccaaaccttc    240
ttatatgaga tgagctctgt cggaaccagt gctcaagttt ttcccacccc aaactgcctg    300
aattgaggga tgggggtggg gagaaggaca gagagaagag aaaaagagag aaagaagana    360
aaggaaaaga acaacccctc tgcaagtgct gatgtgactg aagcactaaa gagtcaaatt    420
aaacaatgaa gattgcaggg tccctttaaa aagggtgcac tgcagncccc ngagcacanc    480
natcccattc gnttgngccg ctncacanat tctagagaan tcnnccatca tgtttgaaan    540
gcncaaaant gatgggannt cccgnntacg cggggactta attctgcctt gggaaatcaa    600
ggaanacttt gnttggangc ggcanttnaa anntggcctt aagaangnng tgngaatttg    660
ttggccaaac nantngaaag gtnttccggc cgatnggtcc ctgattttta aggattnnaa    720
ng                                                                   722

      <210> 262
      <211> 705
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
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<222> (1)...(705)
<223> n = A,T,C or G

<400> 262
acgctttaaa cnccagcttg gtaccgagct cggatcccta gtaacggccg ccagtgtgct 60
ggaattcgcc cttgccgccc gggcaggtac ctgatatttt gaacttttaa ttgctatcaa 120
atttcagctc tggttttatg cattgttgta atttctcagt gaatcccagt gcttctttcc 180
ttcttgaaaa atgccatttc gcccaggcgc ggtggctcat gcttgtaatc ccagcacttt 240
ggtaggccga ggtgggtgga tcagctgagg tctgtagttc aagaccagcc tggctaacat 300
gatgaaaccc tgtctctacc aaaaatacaa aaaaaaacta gccaggcatg gtgttgtatg 360
cctgtaatcc cagctactca ggaggctgag acaggagaat cgcttgaacc tgggaggtgg 420
aggttgcagt gagccaagat cgcgccactg cactncaacc tgggcaacag agtgagactc 480
catctcaaaa naannaaaaa ggaaaatgcc atttcttggg cccantgcca atatgcacca 540
agaatgttng taggaactac tttggtctgg ctgcagaagt tcttaatcta gcattaaaaa 600
tccaacggtt gatttgatct cttaaaatgg ttttcnnant ttgganctga aattgagnat 660
aaattacctt tgcnnntnaa ttcaaaangt tnaacctnnt tnann 705

<210> 263
<211> 656
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(656)
<223> n = A,T,C or G

<400> 263
acncgcttgt accgagctcg gatccctagt aacggccgcc agtgtgctgg aattcgccct 60
tagcgtggtc gcggcccgag gtaccgcggg ggagaacgcc agggagctgt gagagtgtgc 120
agtcgcgttc ctgctgtccg gacacttttt tcctctactg agactcatct ggtagatccg 180
caggccagtc ctcccagggg ctgaagttgt gaaatatggg ttttctaaga agattaatct 240
atcggcgtag accaatgatc tatgtagaat cttctgagga gtccagtgat gagcaacctg 300
acgaagtgga atcaccaact caaagtcagg attctacacc tgctgaagag agagaggatg 360
agggagcatc tgcagctcaa gggcaggagc ctgaagctga tagccaggaa ctggttcagc 420
caaagactgg gtgtgagctt ggagatggtc ctgataccaa gagggtntgc ctgcgaaatg 480
aagagcagat gaaactgccc gnagaaggcc agacctgann cgatagcagg acagttcccc 540
gaaactggtg tagcgcgaat gtctgtgtca gagtggcctg ccaatcaagg agtgaaccct 600
gggaataagc atccagctta aagannccct ganggttagt gtctngtgaa ttncct 656

<210> 264
<211> 752
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(752)
<223> n = A,T,C or G

<400> 264
ggnttgaang tatacgactc nctanggcga attgggccct ctagatgcat gctcgagcgg 60
cccgccagtg tgatggatat ctgcagaatt cgcccttagc gtggtcgcgg ccgaggtacc 120
tttgataatt cctagacctc tattttcatt ctgtgtatta atgtgaataa cagatggata 180
ttttaatatt taaggcagat ggtaaacttt cctataggtc ttgtgagact tcgtcttata 240
ggctgaacac cattcacaaa atgtaataat gcttcattcc ttcaggttga ggtaaagaac 300
ttgagcaact ggattagcaa agctgcaaag aatgaaatgt ggcctaagat gtaattatgt 360
tctctgccct tcctttgggc cagggtagtt ttgcacttga cacaatggaa aataggccat 420
aaagcctgaa aataaaatgt tctaaacccc aatctcacag cactttagta ggcttttcac 480
taggcatctt taaagtattt tcaacaaaat actaattaag ctaccacttc aaaagagctt 540
caaggaaaag ctctgctttc ttataaaatc tttttgagac agagtttccg ctcttgtcag 600
cacaggctgg agtgcaatgg ccgtgatctc gactnaaccg naaccttcgg cctgctgggt 660

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tcaagtgatt ctctagncct caagcttctg agtaggttgg gattacaggc gcccggncaa     720
ccacacctgg gctaaatttt ggatttctan gn                                   752

      &lt;210&gt; 265
      &lt;211&gt; 747
      &lt;212&gt; DNA
      &lt;213&gt; Homo Sapien

      &lt;220&gt;
      &lt;221&gt; misc_feature
      &lt;222&gt; (1)...(747)
      &lt;223&gt; n = A,T,C or G

      &lt;400&gt; 265
gngntttcnc nnngcgctct anagcatgct cgagcggccg ccagtgtgat ggatatctgc      60
agaattcgcc cttagcgtgg tcgcggccga ggtacctttg atnattccta gacctctatt     120
ttcattctgt gtattaatgt gaataacaga tggatattgt aatatttaag gcagatggta     180
aactttccta taggtcttgt gagactncnt cttataggct gaacaccatt nacnanntgt     240
antaatgctt nattccttca ggcngaggtn nanaacttga gcacctggat tagcagcagc     300
tgcgaagaat gaaatgcngc ctaacatgta attatgnatc tctgnccttc ctttgggcca     360
gggtagtnat gcnctagaca cantggatga tangccatna agcctgannn tgnaatgatc     420
taaacccnaa tctnncagca ctttattagg ctantcacta ggcatcttta agagtnggtt     480
cccnttaata ctagncaacc nnccactcca aaananсttc aagganaagc tntgntntnt     540
tanaaaatct tttcgnnaca cantttnacn cttggcgcnc angctggant gcaatggccg     600
tgatctctac tcacccgaan cctcngactg ctgagttcaa gtgattgtct gnccttanct     660
ctccgggacc angnttnggg attancaagc ctcgcgggca annacaggtg nctaattgnt     720
tgcattngcn taaaatnagg acaccng                                         747

      &lt;210&gt; 266
      &lt;211&gt; 738
      &lt;212&gt; DNA
      &lt;213&gt; Homo Sapien

      &lt;220&gt;
      &lt;221&gt; misc_feature
      &lt;222&gt; (1)...(738)
      &lt;223&gt; n = A,T,C or G

      &lt;400&gt; 266
cgnnnntgaa ggntacgact cactataggg cgaattgggc cctctagatg catgctcgag      60
cggccgccag tgtgatggat atctgcagaa ttcgcccttt cgagcggccg cccgggcagg     120
tacagctgaa gtttgataac aaagaaatat atataagaca aaaatagaca agagttaaca     180
ataaaaacac aactatctgt tgacataaca tatggaaact ttttgtcaga aagctacatc     240
ttcttaatct gattgtccaa atcattaaaa tatggatgat tcagtgccat tttgccagaa     300
attcgtttgg ctggatcata gattaacatt ttcgagagca aatccaagcc attttcatcc     360
aagtttttga catgggatgc taggcttctg gtttccattt gggaaatgta ttcttatagt     420
cctgtaaaga ttccacttct ggccacactt cattattggg agtgcccaaa gctctgaaat     480
cctgaagagt tgatcaattc tgaatcccat ggaaaagtgg ttcttagtgc tagtcaacaa     540
atatnggngc ctatactcca aaggtcactt ggagttgagt natggagctg accccagcat     600
acttttggaa aactggacca agtggttgca ccaccnttaa aaaatttaaa accggnngta     660
ttttaaataa ggtggaagaa accttttcct tttttattta aggaattcac ttagcnctta     720
ctaaattcat ggtggggg                                                   738

      &lt;210&gt; 267
      &lt;211&gt; 731
      &lt;212&gt; DNA
      &lt;213&gt; Homo Sapien

      &lt;220&gt;
      &lt;221&gt; misc_feature
      &lt;222&gt; (1)...(731)
      &lt;223&gt; n = A,T,C or G
```

<400> 267
gngnnttgn aagggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttcgag cggccgcccg ggcaggtaca gctgaagttt gataacaaag 120
aaatatatat aagacaaaaa tagacaagag ttaacaataa aaacacaact atctgttgac 180
ataacatatg gaaacttttt gtcagaaagc tacatcttct taatctgatt gtccaaatca 240
ttaaaatatg gatgattcag tgccatttg ccagaaattc gtttggctgg atcatagatt 300
aacattttcg agagcaaatc caagccattt tcatccaagt ttttgacatg ggatgctagg 360
cttcctggtt tccatttggg aaatgtattc ttatagtcct gtaaagattc cacttctggc 420
cacacttcat tattgggagt gcccaaagct ctgaaaatcc tgaagagttg atcaatttct 480
gaatccccat ggaaaagtgg tttcttagtt gctagttcag caaatatggt gcctatactc 540
caaatgtcaa ctggagttga gtaatgagct gaccccagca atacttctgg agatctgtca 600
agtggttgca acaccattaa aaaatataaa agcagtagtt atattaaaat aatgttgaag 660
aaaacatatn cctatatatt tnaaggaatt tcactaagca ctactaaatt tcatgttgtt 720
gggangngtt a 731

<210> 268
<211> 745
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 268
gnnnnnntaa agnanacntc actatanngc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgccctttg agcggccgcc cgggcaggta 120
cttcccacac aggtttgttg taaaaattaa gtgagctaat gtgtataaaa tacttcagtg 180
ctgaataaat gttggctttt attatatatt gttaaaaaac aacacaggct gggtatgata 240
gctcacgcct ataatcctag catttaggga ggccaaggca ggaggattgc ttgagtccag 300
gggtttgaga ccagcctggg caacatagtg agaccctatc tctacaaaat aaaataaatt 360
agttgggcat ggtggcacat gcctgtagtc ccagctactc aggaggctga ggtgggagga 420
ttgcttgagc ccaggaggta gaggttgcag tgagctgtga tcacaccact gcactccagc 480
gtcggtgacg gagtgagaac ctatctcaaa caaacaaaca aaaaaaccca aaacaaacaa 540
aaaaatccag taaagacaga gattcctaaa attctacaat tctaaaaacc agtagggctc 600
actgaatata agagaggcaa gcaaaaaatt actccaatat tttgagtttg ggtaacctgg 660
aatatgggtc atttattgag taaatagtta ctgagtccta actatgtgcc acacactggg 720
ttaacacttg gcactgtctc ttatg 745

<210> 269
<211> 730
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(730)
<223> n = A,T,C or G

<400> 269
gntnnnnttt tnaanccggt cctnntgcat gctcgagcgg cccgccagtg tgatggatat 60
ctgcagaatt cgccctttga gcggccgccc gggcaggtac ttcccacaca ggtttgttgt 120
aaaaattaag tgagctaatg tgtataaaat acttcagtgc tgaataaatg ttggctttta 180
ttatatattg ttaaaaaaca acacaggctg ggtatgatag ctcacgccta taatcctagc 240
atttagggag gccaaggcag gaggattgct tgagtccagg ggtttgagac cagcctgggc 300
aacatagtga gaccctatct ctacaaaata aaataaatta gttgggcatg gtggcacatg 360
cctgtagtcc cagctactca ggaggctgag gtgggaggat tgcttgagcc caggaggtag 420
aggttgcagt gagctgtgat cacaccactg cactccagcg tcggtgacgg agtgagaacc 480
tatctcaaac aaacaaacaa aaaaacccaa aacaaacaaa aaaatccagt aaagacagag 540
attcctaaaa ttctacaatt ctaaaaacca gtagggctca ctgaatataa gagaggcaag 600

caaaaaatta ctccaatatt ttgagtttgg gtaacctgga atatggtcat tattgagtna 660
atagttactg agtcctacta tgtgcccaca ctgggtnaac acttgcactg tctcttatga 720
aatcttccan 730

<210> 270
<211> 713
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(713)
<223> n = A,T,C or G

<400> 270
aattgggccc tctagatgca tgctcgagcg gccgccagtg tgatggatat ctgcagaatt 60
cgccctttcg agcggccgcc cgggcaggta caaaccaata gctcctattc tggaaggttt 120
tctttttatt taaaaaaaat tcaaacaagg ttaaaagtca agcaagaagg gaagagagaa 180
actgggttct gagaaaaaaa tgtgccagta taaaataaac tcctaaatgc gtgcttgtca 240
tcctctagtt tttttttaa gttgaatttc ttttccactg taacttaaga tttgagattg 300
aggtttgcgg tccagaacat accctcagca gatacagtga ctaactggaa agtgcagttg 360
ttcaaggtct gtcatgctca atcacctaaa gctataattt gnttgatata ttaagcatgt 420
agacctagtg cagcatggga gccactcagg aagtttatgc aattaataaa ctttcagcat 480
aatttactat gaagtatgca gaatttcacc ctcttctcca cacttaacat ttagttgtat 540
atgtgaactc tcctttctta attggggaat gtagcattat atagaatgtt gntaaaggta 600
atttaatcc tttttgacat taaccttttt ttttttggn aaaccaagtg atctgccttt 660
cagcaactgg cttattttgg gtctttgaaa ctgngatttt tatttcattn gnc 713

<210> 271
<211> 702
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(702)
<223> n = A,T,C or G

<400> 271
gnctcgagcg gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc 60
cgggcaggta caaaccaata gctcctattc tggaaggttt tctttttatt taaaaaaaat 120
tcaaacaagg ttaaaagtca agcaagaagg gaagagagaa actgggttct gagaaaaaaa 180
tgtgccagta taaaataaac tcctaaatgc gtgcttgtca tcctctagtt tttttttaa 240
gttgaatttc ttttccactg taacttaaga tttgagattg aggtttgcgg tccagaacat 300
accctcagca gatacagtga ctaactggaa agtgcagttg ttcaaggtct gtcatgctca 360
atcaccctaa agctataatt tgtttgatat attaagcatg tagacctagt gcagcatggg 420
agccactcag gaagtttatg caattaataa actttcagca taatttacta tgaagtatgc 480
agaatttcac cctcttctcc acacttaaca tttagttgta tatgtgaact ctcctttctt 540
aattggggaa tgtncattat atagaatgtt ggtaaaggta attttaatcc tttttgacat 600
taaccttttt ttttttttgg taaaccaagt gatctgnctt ttaacaactg gcttatttgg 660
gtcctttgna actgggaatt ttatttcatt tgnncctcgg cc 702

<210> 272
<211> 736
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(736)
<223> n = A,T,C or G

<400> 272
gnnntttgan nnnnnnnnnn ntatagggcg aattgggccc tctagatgca tgctcgagcg 60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta 120
cttttttta ttcctcagtt aaaacatgcc tgttattctt tttgtaatac ttaagcaatt 180
ttattttaaa gatatactac ttagttcatc cgtctccact tgtttttttt ttttgnnant 240
annggggttgg ttccnttaan nccacnggtt ttaaanccat nntngtcnnn ggnaaattan 300
nnttantnat taaanntnnn tnncntngca aanntccagn taaaatttta gtgggggggg 360
ggggttantt acnggnaann aattaantnc nggnnaatan tttaannntt ggnaangnac 420
nntngnnnta annattattt nnttnanntt tttaataann annaatttta ntttgnaacn 480
ntggtntttta ntaannggaa annccaatta attggttggt tgnatttttc ccagnaaccn 540
ntccntgggc nggaacnncc ntangggnaa nttcnagnnn ntngngggcn gtncnnaggg 600
nnnccaacnt nggcccancn tggnggaann nnnggcnnna nnggttcccn ggggnaaatg 660
gtattcngtt cnaatccnnc aanttccaac ccggagnctt aangggtaan nccngggggg 720
cntanngagn gcctaa 736

<210> 273
<211> 715
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(715)
<223> n = A,T,C or G

<400> 273
gngntttnac ganngnnnnn nnnnnctgct cgagcggccg ccagtgtgat ggatatctgc 60
agaattcgcc ctttcgagcg gccgcccggg caggtacttt tttttattcc tcagttaaaa 120
catgcctgtt attctttttg taatacttaa gcaattttat tttaaagata tactacttag 180
ttcatccgtc tccacttgtt tttttttttt gnnantanng ggttggttcc nttaanncna 240
cnggtnttaa anccannnnn gtcnnnggna aattannntt antcnntaaa nntnnnnnnc 300
ntggnaannn tccagntaaa atttnagtgg gggggggggg ttaattancg gnaannantt 360
aantnccgga naatanttta annnttggna angnacnttn gnnntaagna ttatttnntt 420
canntttttta atnantanna attttaattt gnaancntgg nntttannaa nnggaaannc 480
caattaattg gttggttgna tttttcccag naaccnnncc ntgggcngga acanccntaa 540
ggncaaatcn accaantgnc ggccgtacna aggggatcca acntnggccc ancctggnng 600
naataatggc cnaantggtt nccngggnna aatggnattc cgttcaaatt ccnccanntc 660
cnacccggag ccttaagngg taaacctggg ggcctaangg ggggcctaac tcaat 715

<210> 274
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 274
gnnnntnnan gnntacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
ccaggtgggc tgacgcacat cccctaaaca ttctggatct cttactcatc gtgaaaggca 180
gacgctctaa gtctaaagtc tagggtagga gtttccattc tttggaaaac caaagatggt 240
tactcttctt aatgaaactg agaagaaggt atctacagaa aacactgaat ttaaacaaat 300
tatgaccttg tttgttgaag ccatcaagga cccaagatat atcaaagaac aacatctctg 360
tattggccta caggttcaga gtgttttgag gtctgtttaa gcactaatag gattttaggc 420
cagcatccag tcagaagaga tagttcacag actcagagtt ggaaacagat taaaaaaaaa 480
aagatgtcaa catagaaaat gatgatagag tttagttaaa aaaattcaca cataaaatta 540
cagttaaaaa aattcacaca taaaatagag tgtttgcata gcaagacatt attgcccttc 600
agcctggcag aaaaacataa actcaggtgt atattttata ataaacattg nattgaatgc 660
taagaatgat acactggtga acatctnctg aatggttgcc ttcttgtaaa tcataccaat 720

tggttagaca attgaaattn ccagct 746

<210> 275
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 275
gnnnttaann ccttccctnt anatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtaccagg tgggctgacg cacatcccct 120
aaacattctg gatctcttac tcatcgtgaa aggcagacgc tctaagtcta aagtctaggg 180
taggagtttc cattctttgg aaaaccaaag atggttactc ttcttaatga aactgagaag 240
aaggtatcta cagaaaacac tgaatttaaa caaattatga ccttgtttgt tgaagccatc 300
aaggacccaa gatatatcaa agaacaacat ctctgtattg gcctacaggt tcagagtgtt 360
ttgaggtctg tttaagcact aataggattt taggccagca tccagtcaga agagatagtt 420
cacagactca gagttggaaa cagattaaaa aaaaaaagat gtcaacatag aaaatgatga 480
tagagtttag ttaaaaaaat tcacacataa aattacagtt aaaaaaattc acacataaaa 540
tagagtgttt gcatagcaag acattattgc ccttcagcct ggcagaaaaa cataaactca 600
ggtgtatatt ttataataaa cattgnattg aatgctaaga atgatcactg ttgaacatct 660
cctgaatggt ttgccttctt gtaaatcata ccaatggtta gacaattgaa attccagctc 720
tttct 725

<210> 276
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 276
nnnnntgann gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
cttctgctgt ggtaactcaa gtaaccctcc gtttaaacca ggacagacct atgctgacaa 180
ccatttttat cactcttagt ggtattttct ttctttgaac atgaatgcat atttctgctc 240
tttaatggcc tttggtattt aagattacat tcagctagtc tccttattgc atgttgtttt 300
attccagtcc caccagcact cagaacaaca gcaagtgtgt gtaacagcgg gcacaggcgc 360
tccagacgga aggacctcac tgacgcagtt agctcaggta gagcttattt ctgtgttcaa 420
ttttcttgtc atgagaagca gtgaccccta agaatttgta tccctttgtt cacttctttg 480
ttttaggaga gaaacttcta aagcattact ctaaaaggtg atagagacag agacgggcca 540
ttttcatcta ccccttgcag agttaagttt tattacagta agttgtgagg tgagacatga 600
tggctgcagg cacatagtca agatctaccc ttctaaggaa ataaaacggg gaaaagtggt 660
tgaatgtcca atatagaaaa tttaatcacc actttcccaa aaaagaataa atggaggact 720
ncattggaat tatggaaatg aaan 744

<210> 277
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 277
gnnnnttncg antgggccct ctagatgcat gctcgagcgg ccgccagtgt gatggatatc 60
tgcagaattc gcccttagcg tggtcgcggc cgaggtactt ctgctgtggt aactcaagta 120
accctccgtt taaaccagga cagacctatg ctgacaacca tttttatcac tcttagtggt 180
attttctttc tttgaacatg aatgcatatt tctgctcttt aatggccttt ggtatttaag 240
attacattca gctagtctcc ttattgcatg ttgttttatt ccagtcccac cagcactcag 300
aacaacagca agtgtgtgta acagcgggca caggcgctcc agacggaagg acctcactga 360
cgcagttagc tcaggtagag cttatttctg tgttcaattt tcttgtcatg agaagcagtg 420
acccctaaga atttgtatcc ctttgttcac ttctttgttt taggagagaa acttctaaag 480
cattactcta aaaggtgata gagacagaga cgggccattt tcatctaccc cttgcagagt 540
taagttttat tacagtaagt tgtgaggtga gacatgatgg ctgcaggcac atagtcaaga 600
tctacccttc taaggaaata aaacggggaa aagtggttga atgtccaata tagaaaattt 660
aatcaccact ttccaaaaaa gaataaatgg aggactncat tgtaattatg gaaatgaaat 720
ttgg 724

<210> 278
<211> 748
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(748)
<223> n = A,T,C or G

<400> 278
gnnnntgaaa gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggcccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacagctgc ccaagggcgt tcgtaacggg aatgccgaag cgtgtgaaaa agggagcggt 180
ggcggaagac ggggatgagc tcaggacaga gccagaggcc aagaagagta agacggccgc 240
aaagaaaaat gacaaagagg cagcaggaga gggcccagcc ctgtatgagg accccccaga 300
tcagaaaacc tcacccagtg gcaaacctgc cacactcaag atctgctctt ggaatgtgga 360
tgggcttcga gcctggatta agaagaaagg attagattgg gtaaaggaag aagccccaga 420
tatactgtgc cttcaagaga ccaaatgttc agagaacaaa ctaccagctg aacttcagga 480
gctgcctgga ctctctcatc aatactggtc agctccttcg gacaaggaag ggtactagca 540
actaaccatg gttaaaggt cttagtcaga attacaaaaa caaaacattt agagtaatac 600
ttatgaatac aagcataatt ggttcctcgc cttctacaaa taaccatctt gaaaatgata 660
aaagcaggtt tcaactgtgg tcttctctca ttgagaaggt gcagatacac atgggtgatc 720
tactgattta ccttcttgaa agtnctcg 748

<210> 279
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 279
gnnnnttcga ntgggccctc tngngcatgc tcgagcggca cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtaca gctgcccaag ggcgttcgta 120
acgggaatgc cgaagcgtgt gaaaaaggga gcggtggcgg aagacgggga tgagctcagg 180
acagagccag aggccaagaa gagtaagacg gccgcaaaga aaaatgacaa agaggcagca 240
ggagagggcc cagccctgta tgaggacccc ccagatcaga aaacctcacc cagtggcaaa 300
cctgccacac tcaagatctg ctcttggaat gtggatgggc ttcgagcctg gattaagaag 360
aaaggattag attgggtaaa ggaagaagcc ccagatatac tgtgccttca agagaccaaa 420
tgttcagaga acaaactacc agctgaactt caggagctgc ctggactctc tcatcaatac 480
tggtcagctc cttcggacaa ggaagggtac tagcaactaa ccatggttaa aaggtcttag 540
tcagaattac aaaaacaaaa catttagagt aatacttatg aatcaagcat aattggttcc 600
tcgccttcta caaataccat ctttgaaaat gatnaaaagc aggtttcaac tgtggttctt 660

ctctcanttg aaaaggtcag atcccatggg tgatctactg atttaccttc tgaaaagtac 720
ttggccg 727

<210> 280
<211> 751
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(751)
<223> n = A,T,C or G

<400> 280
gnnnntgann gtatacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
ctcatgtatt tttttttttt tccagatctc tttccccaag ttgctattgt aagagtattc 180
tgctgcgtgt ggatgcagtt atacacatta aagcagatct ggagtctgaa gtagctataa 240
agcagctata aaacagaaat acatgcatag ctgcagaaac catgataggt agaggacttt 300
tcttttggtt ttgttttgtt ttgttttgtt ttgtttttgg ttttacagag aagagatttt 360
tattacaaag aaaaaaattc cagtgaattg tgcagaaatg ctggttttta caccatccta 420
aagaaaaact ttacaagggt gttttggagt agaaaaaagg ttataaagtt ggaatcttaa 480
attgtaaaat taaccattga gtgtcaaagt tctaaaagca gaactcattt tgtgcaatga 540
acataaggaa agactactgn ataggttttt tttttctcct tttaaatgaa gaaaagcttt 600
gcttaagggt tgcatacttt tattggagta aatctgaatg atcctactcc tttggagtaa 660
aactagtgct taccagtttc caattggatt taacttctgg ggtggaattt ggaaaaaaaa 720
agaannnngg aaaaagaaaa cctaanttaa n 751

<210> 281
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 281
gnnnttcgan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtactcat gtattttttt ttttttccag 120
atctctttcc ccaagttgct attgtaagag tattctgctg cgtgtggatg cagttataca 180
cattaaagca gatctggagt ctgaagtagc tataaagcag ctataaaaca gaaatacatg 240
catagctgca gaaaccatga taggtagagg actttttcttt tggttttgtt ttgttttgtt 300
ttgttttgtt tttggtttta cagagaagag atttttatta caaagaaaaa aattccagtg 360
aattgtgcag aaatgctggt ttttacacca tcctaaagaa aaactttaca agggtgtttt 420
ggagtagaaa aaaggttata aagttggaat cttaaattgt aaaattaacc attgagtgtc 480
aaagttctaa aagcagaact cattttgtgc aatgaacata aggaaagact actgnatagg 540
tttttttttt ctcctttttaa atgaagaaaa gctttgctta agggttgcat acttttattg 600
gagtaaatct gaatgatcct actcctttgg agtaaaacta gngcttccag tttccaattg 660
gatttaactt ctggntggaa tttgnaaaaa aaagaanaaa aggaaaanga aaccctaant 720
naaatag 727

<210> 282
<211> 749
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(749)
<223> n = A,T,C or G

<400> 282
tnnaaagnaa gctctttact cactatnngg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attctncctt cgagcggccg cccgggcagg 120
tacttttttt ttttttttt ttttttttt tttttnaaac tactaggatt tactgtagga 180
taaaagctnt acatggccct gcntacaaac tttctgcata cttctgcaaa tttttatgcn 240
ttactnaatc cattaaaaat caccttggaa naaactgcaa acncantana aactaaatga 300
natagtcaca gagaacanca aaaatagtaa ttnaagttcc catacaacat caagtgtgtn 360
cagtctattt tnggttcttc gggttctctt taaaattgaa ttgagtttgn atatgcatat 420
gtatgtagga gtggaggatg gaattaatta tcccaaacat cctacantca ctcctctaat 480
atttctttng ttaacatgca aatctgttct cttcattacg gngatactgc atttacatta 540
caacacantt agagatcatt aactttctcc tttataatca gccattttca caggcctttg 600
atatacaagc acctataata tattcttact catctcacac tttcatttac caaagtgtca 660
aaacaacatt tttacatcat tgatatttgg ttnantttct gcaanctggc tgttanaaaa 720
tgattacttc tnttaaatta ccttttanc 749

<210> 283
<211> 730
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(730)
<223> n = A,T,C or G

<400> 283
gtctntgaan cnggncctct ngatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttcgagcg gccgcccggg caggtacttt ttttttttt ttttttttt 120
ttttttttc aaactactag gatttactgt aggataaaag ctntacatgg ccctgcatac 180
aaactttntg catacttntg caaattttta tgcattactc aatccattaa aaatcacctt 240
ggaanaaact gcaaacncaa tagaaactaa atganatagt cacagagaac aacaaaaata 300
gtaatttaag ttcccataca acatcaagtg tgttcagtct atttttggtt cttcgggttc 360
tctttaaaat tgaattgagt ttgtatatgc atatgtatgt aggantggag gatggaatta 420
attatcccaa acatcctaca ctcactcctc taatatttct tttgttaaca tgcaaatctg 480
ttctcttcat tacggngata ctgcatttac attacaacac aattagagat cattaacttt 540
ctcctttata atcagccatt ttcacaggcc tttgatatac aagcacctat aatatattct 600
tactcatctt acactttcat ttaccaaagt gtcaaaaaca acatttttac atcattggat 660
atttggttta gtttctgcaa nctggctttt anaaaaatga ttacttctct taaattacct 720
tttaccctca 730

<210> 284
<211> 739
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(739)
<223> n = A,T,C or G

<400> 284
gnnntnaaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
aacataaagc aacagagagg tcttcatgtt tgggaagtgg ctgggcagga tgccaaaccc 180
caaatgactt attgagcaat ttctaaacca aacagagagg taggaaaaga ggatgggggt 240
caggggtgga ggctgtggaa aggggagagc gagggctgaa gagaatggca gccatacagg 300
tgttttgttt ttatttccac atctgaggac tgagagtctg atttgctgcc tgtccatttc 360
cgccactcat tgactgtcca tagttcatca tgccattggc tccatagaag ttcatcccag 420
ccatctgctg ggtcatctga gtaaggttcc attgcagctg ctgagctggc tggaccccat 480
acacagtctg ggcatagct gccatgcctg ccatgtagcc agcctgctgg gtggtcatca 540
ttccattcgg cacacccatc attgatgcct gcatgccacc catatagcct gcaggcatgg 600

```
ccatgggggc aaccatccca gaactnctgc tgagcaacca tgcctactgg tggaagcatc      660
atgcttccca ttatgctgtt angangtgta ccccngggaa actggggtag ctgtgggata      720
tccatctgan ccggaccat                                                   739
```

<210> 285
<211> 721
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(721)
<223> n = A,T,C or G

<400> 285

```
gnnnttcgan tgggccctct ngatgcatgc tcgagcggcc gccagtgtga tggatatctg       60
cagaattcgc ccttagcgtg gtcgcggcac gaggtacaac ataaagcaac agagaggtct      120
tcatgtttgg gaagtggctg ggcaggatgc caaaccccaa atgacttatt gagcaatttc      180
taaaccaaac agagaggtag gaaaagagga tgggggtcag gggtggaggc tgtggaaagg      240
ggagagcgag ggctgaagag aatggcagcc atacaggtgt tttgttttta tttccacatc      300
tgaggactga gagtctgatt tgctgcctgt ccatttccgc cactcattga ctgtccatag      360
ttcatcatgc cattggctcc atagaagttc atcccagcca tctgctgggt catctgagta      420
aggttccatt gcagctgctg agctggctgg accccataca cagtctgggg catagctgcc      480
atgcctgcca tgtagccagc ctgctgggtg gtcatcattc cattcggcac acccatcatt      540
gatgcctgca tgccacccat atagcctgca ngcatggcca tgggggcaac catcccagaa      600
ctcctggctg agcaaccatg cctactggtg gangcatcat gcttcccatt atgctgttag      660
gangtgtacc ccggggaanc tggggtagct gtgggatatc catttaaccg gagccatgaa      720
c                                                                      721
```

<210> 286
<211> 757
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(757)
<223> n = A,T,C or G

<400> 286

```
gnnnnttaaa gnntacgact cactataggg cgaattgggc cctctagatg catgctcgag       60
cggcccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag      120
gacgcggggg ttgcaccatg gcgtccatgg ggaccctcgc cttcgatgaa tatgggcgcc      180
ctttcctcat catcaaggat caggaccgca agtcccgtct tatgggactt gaggccctca      240
agtctcatat aatggcagca aaggctgtag caaatacaat gagaacatca cttggaccaa      300
atgggcttga taagatgatg gtggataagg atggggatgt gactgtaact aatgatgggg      360
ccaccatctt aagcatgatg gatgttgatc atcagattgc caagctgatg gtggaactgt      420
ccaagtctca ggatgatgaa attggagatg gaaccacagg agtggttgtc ctggctggtg      480
ccttgttaga agaagcggag caattgctag accgaggcat tcacccaatc agaatagccc      540
gatggctatg agcaggctgc tcgcgttgct attgaacacc tggacaagat cagcgatagc      600
gtccttgttg acataaagga caccgaaccc ctgattcaga cagcaaaaaa ccacgctggg      660
cttncaaaag tggtcaacag ttgtcaccga cagatggctt gaaaattgct gtgaaatgcc      720
cgtccttact gtaaccagat atngaaccgg aaaagac                               757
```

<210> 287
<211> 726
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(726)

<223> n = A,T,C or G

<400> 287
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gnnnnactga tttctggctc gaagttgnat ntgcggncgc cagtgtgatg gatatctgca      60
gaattcgccc tttcgagcgg ccgcccgggc aggacgcggg ggttgcacca tggcgtccat     120
ggggaccctc gccttcgatg aatatggcg  ccctttcctc atcatcaagg atcaggaccg     180
caagtcccgt cttatgggac ttgaggccct caagtctcat ataatggcag caaaggctgt     240
agcaaataca atgagaacat cacttggacc aaatgggctt gataagatga tggtggataa     300
ggatggggat gtgactgtaa ctaatgatgg ggccaccatc ttaagcatga tggatgttga     360
tcatcagatt gccaagctga tggtggaact gtccaagtct caggatgatg aaattggaga     420
tggaaccaca ggagtggttg tcctggctgg tgccttgtta gaagaagcgg agcaattgct     480
agaccgaggc attcacccaa tcagaatagc ccgatggcta tgagcaggct gctcgcgttg     540
ctattgaaca cctggacaag atcagcgata gcgtccttgn tgacataaag gacaccgaac     600
ccctgattca gacagcaaaa accacgctgg gctccaaaag tggtcaacag ttgtcaccga     660
cagatggctg aaaatgctgt gaatgccgtc ctnctgtanc agatatngaa ccggaaaaga     720
ccttga                                                                726
```

<210> 288
<211> 743
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(743)
<223> n = A,T,C or G

<400> 288
```
gnnntganng tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc      60
ggccgccagt gtgatggata tctgcagaat tcgcccttcg gccgcccggg caggtacctt     120
ttacctaaaa ttctagccac tttaatttgg agagtttcca gagcaaaggg cacagatccc     180
aggcataaca acgctttgcg tatacagcaa ccaatatctt gtcaacccaa gaaagttcct     240
ccattgatac ctagtagaaa tagcccagtt tttaaagtcc tcaaaactgt aacaaattac     300
ttgtttttaa aatttaactt aaattaatac aatcagattt ttgtgttatt tgggtattag     360
agtatgttaa agcacatata tcccagagac atagagtttc cgtttcaaaa agtcatgcat     420
tcatgtgtgc taatgacaat cctatcctga cccgctatgt gacttgtatc tctaaaccat     480
aggctttcct gaattttatc tgttaattta accctgattt ctcagcagca gcttctcttt     540
gtaaatagac ttgcctcttc tgtgtctgac ctctgctcct cataatcaga ttaactcaga     600
taaagctgct tcagggaaga ggtcaaaacc gttgccaaaa atagtagttg ccctacttca     660
gtctattttc aacagagtag cccaggagat ctgtcacacc aaagtccaat cagccctact     720
ggtagcactc tgntcacaag ccn                                             743
```

<210> 289
<211> 726
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(726)
<223> n = A,T,C or G

<400> 289
```
gnnnnnactc gcagtccgtc tagatgcatg ctcgagcggc cgccagtgtg atggatatct      60
gcagaattcg cccttcggcc gcccgggcag gtacctttta cctaaaattc tagccacttt     120
aatttggaga gtttccagag caaagggcac agatcccagg cataacaacg ctttgcgtat     180
acagcaacca atatcttgtc aacccaagaa agttcctcca ttgataccta gtagaaatag     240
cccagttttt aaagtcctca aaactgtaac aaattacttg tttttaaaat ttaacttaaa     300
ttaatacaat cagatttttg tgttatttgg gtattagagt atgttaaagc acatatatcc     360
cagagacata gagtttccgt ttcaaaaagt catgcattca tgtgtgctaa tgacaatcct     420
atcctgaccc gctatgtgac ttgtatctct aaaccatagg ctttcctgaa ttttatctgt     480
taatttaacc ctgatttctc agcagcagct tctctttgta aatagacttg cctcttctgt     540
```

gtctgacctc tgctcctcat aatcagatta actcagataa agctgcttca gggaagaggt 600
caaaaccgtt gccaaaaata gtagttgccc tacttcagtc tattttcaac agagtagcca 660
ggagatctgt tcacaccaaa gtccaatcag ccctactggt agcactctgc tcacaagcct 720
ncagtg 726

<210> 290
<211> 740
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

<400> 290
gnnnngaaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
ccagatgtct ttctcggtca ccttcccgag accatttaag acctccctag ctgctcgttc 180
tccagcctca actgcccctt ccatgtagcc gctccacttt gtggcagtct ctgtgcccgc 240
aaagaaaatc ctgcccacgg gttgacgaat caccсttcca tattgagtca tgatcccagg 300
agggaagtag gccgtgtagc agcccccaga gtacctgccc gggcggccgc tcgaaagggc 360
gaattccagc acactggcgg ccgttactag tggatccgag ctcggtacca agcttggcgt 420
aatcatggtc atagctgttt cctgtgtgaa attgttatcc gctcacaatt ccacacaaca 480
tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc taactcacat 540
taattgcgtt gcgctcactg cccgctttcc agtcgggaaa cctgtcgtgc cagctgcatt 600
aatgaatcgg ccaacgcgcc ggggagaggc ggnttgcgta ttgggcgctc ttncgctttc 660
tngctcactg actcgctgcg ctcggtcgtt cggctgcggc nagcggtatc agctcattaa 720
angcggtaat acggtatccn 740

<210> 291
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 291
gnnnnnncna ntgggccctc tngngcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtacccag atgtctttct cggtcacctt 120
cccgagacca tttaagacct ccctagctgc tcgttctcca gcctcaactg ccccttccat 180
gtagccgctc cactttgtgg cagtctctgt gcccgcaaag aaaatcctgc ccacgggttg 240
acgaatcacc cttccatatt gagtcatgat cccaggaggg aagtaggccg tgtagcagcc 300
cccagagtac ctgcccgggc ggccgctcga aagggcgaat tccagcacac tggcggccgt 360
tactagtgga tccgagctcg gtaccaagct tggcgtaatc atggtcatag ctgtttcctg 420
tgtgaaattg ttatccgctc acaattccac acaacatacg agccggaagc ataaagtgta 480
aagcctgggg tgcctaatga gtgagctaac tcacattaat tgcgttgcgc tcactgcccg 540
ctttccagtc gggaaacctg tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga 600
gaggcggttt gcgtattggg cgctcttccg cttcctcgct cactgactcg ctgcgcttng 660
nccgtccggt tgcggcagcg gtataactna ctcaaaggcg gtaataccgg tatncacaga 720
atca 724

<210> 292
<211> 740
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature

<222> (1)...(740)
<223> n = A,T,C or G

<400> 292
gnnnngnang tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc 60
ggcccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
cagaaagaat caaagaacat atatatatat taagtttcat tccaacctac aaagagcctg 180
cacttaaaag tcttaaaggt ttcctgaatc atggaatctc aacttacctg ccaattaatc 240
cagttctctc tttttaaatg cagactccaa ccttaaacag aaggcatatt ctagctgact 300
tctaagtgtg tccaaagcat acctcagaga gccaagtggt ctgtgttcaa tacctattct 360
ttctatagaa tctcaaaagt ggcagtatga tgaaaagaaa agctactttt tctcctaaaa 420
ataccccccct tcatcatcag tgtgttgtca ttttgcatc acaaagaata gacattctaa 480
atgttccctt ccacacagaa agacataaga gagaatgtga gtatgagtga gagtgtgtag 540
gtaagttgag ggatagtttg ctatccaaaa tgaatcattt tgaagatgac tttgtaaaga 600
agtaatatag ttaaaaatct caagacatga gattgangan ggcagggaaa taaaggacct 660
angaatggaa aagagttaca gcccatgtga atacatacac aaacctacca ggttatttct 720
gngaattctc acacaggttg 740

<210> 293
<211> 723
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(723)
<223> n = A,T,C or G

<400> 293
gnnnnnnncn annggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg cccttagcgt ggtcgcggcc gaggtacaga aagaatcaaa gaacatatat 120
atatattaag tttcattcca acctacaaag agcctgcact taaaagtctt aaaggtttcc 180
tgaatcatgg aatctcaact tacctgccaa ttaatccagt tctctctttt taaatgcaga 240
ctccaacctt aaacagaagg catattctag ctgacttcta agtgtgtcca aagcatacct 300
cagagagcca agtggtctgt gttcaatacc tattctttct atagaatctc aaaagtggca 360
gtatgatgaa aagaaaagct actttttctc ctaaaaatac ccccttcat catcagtgtg 420
ttgtcatttt tgcatcacaa agaatagaca ttctaaatgt tcccttccac acagaaagac 480
ataagagaga atgtgagtat gagtgagagt gtgtaggtaa gttgagggat agtttgctat 540
ccaaaatgaa tcattttgaa gatgactttg taaagaagta atatagttaa aaatctcaag 600
agcatgagat tganganggc agggaaataa angcctagga atggaaaaga gttaacagcc 660
catgtgaata catagcacaa acctaccagg ttatttctgg gaatctnacc agtttgctgg 720
aaa 723

<210> 294
<211> 736
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(736)
<223> n = A,T,C or G

<400> 294
gnnnnnnnna gaccgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta 120
cctgggatta caggcaccca ccaccacgcc tggctaattt ttttttgtat ctttagtagg 180
gttttgccat gttggccagg ctggtcttta actcctacct cgtgatccac ccgcctcggc 240
cccccaaagt gctaggacca caggcgtgag ccaccacgcc cagccccctg tctcttttt 300
taaaacacaa tttaaaagca gaaagaaaaa atctgtgctg tttagactca gattcttaat 360
tagctagtat ttcttaattc aatcaataaa ttattaagac cttttcactg ctcccttttt 420
aaagtcttct ttggagtgat ttaagtgctt cttattacca agctctcaaa gagaagataa 480

```
aattaaaatc tgatgggtaa ccatttaaat aagacaactg gggtaaccca tttctccagg     540
acccctctct gcaacagaga gctattctct ttctttggcc tagtaaacct ctgctcttaa     600
cctttaaaaa aaaaaaaaaa gtacctcggc cgcgaccacg ctaanggcga attccagcac     660
actggcggcc gttactagtg gatccgaact cggtccaact tggcgtaatc atggcatagt     720
ggttcctgng tgaaan                                                     736

      <210> 295
      <211> 725
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(725)
      <223> n = A,T,C or G

      <400> 295
gnnnnnnnnn anngngccct ctagatgcat gctcgagcgg ccgccagtgt gatggatatc      60
tgcagaattc gccctttcga gcggccgccc gggcaggtac ctgggattac aggcacccac     120
caccacgcct ggctaatttt tttttgtatc tttagtaggg ttttgccatg ttggccaggc     180
tggtctttaa ctcctacctc gtgatccacc cgcctcggcc ccccaaagtg ctaggaccac     240
aggcgtgagc caccacgccc agccccctgt ctcttttttt aaaacacaat ttaaaagcag     300
aaagaaaaaa tctgtgctgt ttagactcag attcttaatt agctagtatt tcttaattca     360
atcaataaat tattaagacc ttttcactgc tccctttttta aagtcttctt tggagtgatt    420
taagtgcttc ttattaccaa gctctcaaag agaagataaa attaaaatct gatgggtaac     480
catttaaata agacaactgg ggtaacccat ttctccagga cccctctctg caacagagag     540
ctattctctt tctttggcct agtaaacctc tgctcttaac ctttaaaaaa aaaaaaaaag     600
tacctcggcc gcgaccacgc taagggcgaa ttccagcaca ctggcggccg ttactagtgg     660
atccgaactc ggtaccaagc ttgcgtaatc atggcatagc tggttcctgt gtgaaatggt     720
atccg                                                                 725

      <210> 296
      <211> 742
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(742)
      <223> n = A,T,C or G

      <400> 296
gnnnnnnnnn nnacaaanct gggtagggcg aattgggccc tctagatgca tgctcgagcg      60
gccgccagtg tgatggatat ctgcagaatt cgccctttcg agcggccgcc cgggcaggta     120
ccatgctgac ttcttggtat cttttaaggc ctaattttcc cttccttgag attactgtag     180
tgtgttccag ctaatttcta tttggaaacg agttggaaca gctgaaaact aggtattatt     240
gaaggcaaag cagcctcacg tcagtttttt atcagctcat ttgggaagtt tttttttttt     300
tttttttta attaattaga aagtaggctg ggcacggtgg ctcatgccta taatcccagc      360
acttggggag gccgaggatc tcctctctgg tggatcactt gagggcagga gttaagagac     420
catcctggcc aacatgatga aaccctgtct ctactaaaaa tacaaaaagt agctgggcgt     480
ggtggcatac tcttacaatc ccagctactt gggaggctga ggcaggagaa tcacttgaac     540
ctaggaagca gaggttgcag tgggccaaga tcacaccact atactctagc ctgggcgaca     600
gaagtgggga aaaaagtagg acccctgtcc tatattcang gttttctcac atatatgaac     660
ccatctaaat tctacgttgg taaaaggaac ctaaggttaa ttagnctata cttatttaag     720
aaccattntg gggnggagat gg                                              742

      <210> 297
      <211> 728
      <212> DNA
      <213> Homo Sapien

      <220>
```

<221> misc_feature
<222> (1)...(728)
<223> n = A,T,C or G

<400> 297
tnnnntttga anncnacnct ctagngcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtacc atgctgactt cttggtatct 120
tttaaggcct aattttccct tccttgagat tactgtagtg tgttccagct aatttctatt 180
tggaaacgag ttggaacagc tgaaaactag gtattattga aggcaaagca gcctcacgtc 240
agtttttat cagctcattt gggaagtttt tttttttttt tttttttaat taattagaaa 300
gtaggctggg cacggtggct catgcctata atcccagcac ttggggaggc cgaggatctc 360
ctctctggtg gatcacttga gggcaggagt taagagacca tcctggccaa catgatgaaa 420
ccctgtctct actaaaaata caaaaagtag ctgggcgtgg tggcatactc ttacaatccc 480
agctacttgg gaggctgagg caggagaatc acttgaacct aggaagcaga ggttgcagtg 540
ggccaagatc acaccactat actctagcct gggcgacaga agtggggaaa aaagtaggac 600
ccctgtccta tattcangtt tttctcacat atatgaaccc atctaaattc tacgttggta 660
aaggtanctt aagttaatta gnctatactt atttaaganc aatatggggt gaaaatggat 720
tttttttn 728

<210> 298
<211> 745
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 298
gnnnnnttna nnnnatacga ctcactatat agggcgaatt gggccctcta gatgcatgct 60
cgagcggccg ccagtgtgat ggatatctgc agaattcgcc cttagcgtgg tcgcggccga 120
ggtacccacg ttttgctcca cactccttga ccgcaggggc tcggacacaa acccctgtca 180
ccaggagagt cagtcagcac tacttgggag ggctaaaggg aaatttggaa ataaaattcc 240
aaagtttgga gtaaaaaaat tcaagtgttg attttatatt ctttcccttt ctgacacagc 300
ctaaagcgta gggggaacat gtgtttatct gtgggagata aacaagatgg agtcccaaag 360
actttaacaa aatatttttt taaaaatcca ctagaataga aatacatta tttagatata 420
ctttatgctg agagtgagta tatatgcttg tcctatttaa acttgtgaga aaaagtggta 480
tcccttgata catttagaaa tatgggggct atcttgtttc attgtggggg tggggcagaa 540
ggagaataaa tgcaggatga ccctgttgaa ggaatcttag catggccaac aggggacgtt 600
tccagtcgat taccaggaaa tgcaagcctt ggggtttcta ctggtggtgg ggctgtcatg 660
aactttaaaa tccaaagcct agacaaggaa aagtgttaga ccaattgaaa agcaatccac 720
cctttttttt tttttttttt ggctt 745

<210> 299
<211> 733
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(733)
<223> n = A,T,C or G

<400> 299
gnnnnnnnnn nnnnnnncct ctagatgctg ctcgaacggc cgccagtgtg atggatatct 60
gcagaattcg cccttagcgt ggtcgcggcc gaggtaccca cgttttgctc cacactcctt 120
gaccgcaggg gctcggacac aaacccctgt caccaggaga gtcagtcagc actacttggg 180
agggctaaag ggaaatttgg aaataaaatt ccaaagtttg gagtaaaaaa attcaagtgt 240
tgattttata ttctttccct ttctgacaca gcctaaagcg tagggggaac atgtgtttat 300
ctgtgggaga taaacaagat ggagtcccaa agactttaac aaaatatttt tttaaaaatc 360
cactagaata gaaaatacat tatttagata tactttatgc tgagagtgag tatatatgct 420

```
tgtcctattt aaacttgtga gaaaaagtgg tatcccttga tacatttaga aatatggggg     480
ctatcttgtt tcattgtggg ggtggggcag aaggagaata aatgccagga tgaccctgtt     540
gaaggaatct tancatggcc aacaggggac gtttccagtc gattaccagg aaatgcaagc     600
cttggggttt ctactggtgg tggggctgtc atgaacnttt aaaatccaaa gcctagacca     660
aggaaaagtg ttaganccan tggaaaagcc attccagccc tttttttttn nnnntttttg     720
gcttttcacc aca                                                        733
```

<210> 300
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 300

```
gnnnntgann gtatacgaac tcactatagg gcgaattggg ccctctagat gcatgctcga      60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag     120
gtacgtagtc taggccatat gtgttggaga ttgagactag tagggctagg cccaccgctg     180
cttcgcaggc ggcaaagact agtatggcaa taggcacaat attggctaag agggagtggg     240
tgttgagggt tatgagagta gctataatga acagcgatag tattattcct tctaggcaca     300
gtagggagga tatgaggtgt gagcgatata ctagtattcc tagaagtgag atggtaaatg     360
ctagtataat atttatgtaa atgaggggcc ccgcgtactc aagtgggtct ctgcctctca     420
gtggtggcct tggtcttcaa gtttcagcaa ttctgggaag ccaaggacac ctccatctcc     480
tcctccctga tctgcaactc atctaagagc agctttctca ctggaatgtc ttgtgtttaa     540
ggaacaagaa tccctgtttc cggtttgggt gcccaagtgc acctactgga tccaacccag     600
gattggagat actttgcaga acacaacatc atctggcaca tgaccagcca tggtgtttca     660
ctttcacaat ttcagcttnc ttcactgatt gcagcataat cgnggtcaac accttcaaga     720
ccaaggctga tgtgggccgc t                                               741
```

<210> 301
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 301

```
gnnnnntncn antgggccct ctngngcatn gctcgagcgg cacgccagtg tgatggatat      60
ctgcagaatt cgccctttcg agcggccgcc cgggcaggta cgtagtctag gccatatgtg     120
ttggagattg agactagtag ggctaggccc accgctgctt cgcaggcggc aaagactagt     180
atggcaatag gcacaatatt ggctaagagg gagtgggtgt tgagggttat gagagtagct     240
ataatgaaca gcgatagtat tattccttct aggcacagta gggaggatat gaggtgtgag     300
cgatatacta gtattcctag aagtgagatg gtaaatgcta gtataatatt tatgtaaatg     360
aggggccccg cgtactcaag tgggtctctg cctctcagtg gtggccttgg tcttcaagtt     420
tcagcaattc tgggaagcca aggacacctc catctcctcc tccctgatct gcaactcatc     480
taagagcagc tttctcactg gaatgtcttg tgtttaagga acaagaatcc ctgtttccgg     540
tttgggtgcc caagtgcacc tactggatcc aacccaggat tggagatact ttgcagaaca     600
caacatcatc tggcacatga ccagccatgg tgtttcactt tcacaatttc agcttncttc     660
actgattgca cataatcgtg gtcaacacct tcaagaccan ggctgatgtn ggccgntaca     720
ngga                                                                  724
```

<210> 302
<211> 745
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(745)
<223> n = A,T,C or G

<400> 302
gnnnntgaaa gtntanacga ctcactatag ggcgaattgg gccctctaga tgcatgctcg 60
agcggccgcc agtgtgatgg atatctgcag aattcgccct ttcgagcggc cgcccgggca 120
ggtactattc cggatataca agatcactgg gagatgttga tgatggagac acagtgacag 180
atttcatggc ccaagagcga gaaagaggca ttactattca atcagctgct gttacatttg 240
attggaaagg ttatagagtc aatctaattg atacaccagg tcatgtggac tttaccttgg 300
aggttgagcg gtgcctaaga gtgttggatg gtgcagtggc tgtatttgat gcctctgctg 360
gtgtagaggc ccagactctc acagtatgga ggcaagctga taaacacaat atacctcgaa 420
tctgtttttt aaacaagatg gacaaaactg gagcaagctt taagtatgca gttgaaagca 480
tcagagagaa gttaaaggca aagcctttgc ttttacagtt accaattggt gaagccaaaa 540
ctttcaaagg agtggtggat gtagtaatga aagaaaaact tctttggaat tgcaattcaa 600
atgatggaaa agactttgag agaaagcccc tcttggaaat gaatgatcct gaattgctga 660
aggaaacaac tgaagcaagg aatgccttaa ttgaacaagt tgcagaattt ggatgatgaa 720
ttgctgactt gggtttanaa naaat 745

<210> 303
<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 303
gnnnttcgan tgggcccttc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtact attccggata tacaagatca 120
ctgggagatg ttgatgatgg agacacagtg acagatttca tggcccaaga gcgagaaaga 180
ggcattacta ttcaatcagc tgctgttaca tttgattgga aaggttatag agtcaatcta 240
attgatacac caggtcatgt ggactttacc ttggaggttg agcggtgcct aagagtgttg 300
gatggtgcag tggctgtatt tgatgcctct gctggtgtag aggcccagac tctcacagta 360
tggaggcaag ctgataaaca caatatacct cgaatctgtt ttttaaacaa gatggacaaa 420
actggagcaa gctttaagta tgcagttgaa agcatcagag agaagttaaa ggcaaagcct 480
ttgcttttac agttaccaat tggtgaagcc aaaactttca aaggagtggt ggatgtagta 540
atgaaagaaa aacttctttg gaattgcaat tcaaatgatg gaaaagactt tgagagaaag 600
cccctcttgg aaatgaatga tcctgaattg ctgaaggaaa caactgaagc aaggaatgcc 660
ttaattgaca agttgcagat ttggatgatg aatttgctga cttggtttta gaagaattan 720
tgag 724

<210> 304
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 304
gnnnnnngaa agtntacgac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt agcgtggtcg cggccgaggt 120
actttataaa tggaattttc ttctacttgt atccatttcc cggggcttat ggacccattc 180
atactctcca tatttagaat caaaggttcc tttctgaaga gaccttaatt ttaaggtaaa 240
acgtggtcca agttcctgaa ttcccacttt cttttcactc ctgaatatgt atctgtgaaa 300
tctgaagaat atgtaatccc gttgattgtg gaatgtggca acctgccttc cgataaattg 360

```
aggattatga ggaaagagag atgcaaacat acgtccaatt gaatgaccca gccgtgttgt     420
aaaattattc agaattattt caggtatgtg ttctgtgggg tccttgcctc ttctcttaat     480
ttctttacga agacgaacac tgctcatttt aaaatgagca gttgggccat ttggcaagtg     540
actcaaaata agtccatttg ggttttacg  atcttcatta ataacaatca ggtctgtgaa     600
atctcttgcg atgcactgtg gaataatttt tttcagaacc agcctcttct gtaataaaca     660
tgtgagtttg gtataactgt gganagctgt cacagagtcg taccagtata ccaaccatac     720
caactntgtt gtagagcaaa a                                               741
```

<210> 305
<211> 719
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(719)
<223> n = A,T,C or G

<400> 305

```
gnnnttncaa ntgggccctc tngatgcatg ctcgagcggc cgccagtgtg atggatatct      60
gcagaattcg ccccttagcgt ggtcgcggcc gaggtacttt ataaatggaa ttttcttcta    120
cttgtatcca tttcccgggg cttatggacc cattcatact ctccatattt agaatcaaag    180
gttcctttct gaagagacct taattttaag gtaaaacgtg gtccaagttc ctgaattccc    240
actttctttt cactcctgaa tatgtatctg tgaaatctga agaatatgta atcccgttga    300
ttgtggaatg tggcaacctg ccttccgata aattgaggat tatgaggaaa gagagatgca    360
aacatacgtc caattgaatg acccagccgt gttgtaaaat tattcagaat tatttcaggt    420
atgtgttctg tggggtcctt gcctcttctc ttaatttctt tacgaagacg aacactgctc    480
attttaaaat gagcagttgg gccatttggc aagtgactca aaataagtcc atttggggtt    540
ttacgatctt cattaataac aatcaggtct gtgaaatctc ttgcgatgca ctgtggaata    600
attttttcag agccagtcct cttctgtaat aaacatgtga agtttggtat actgtggana    660
gctgtcacag agtcgacagt ataccaacca taccaactct gttgnagaac anaaacccat    719
```

<210> 306
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 306

```
gnnnnntgaa agtatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga      60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag    120
gtactccagc ccaggcgaca gagtgagact cagtctcaaa aaaaaaaaaa atttgggcaa    180
gttatagtcc atctcatagt gttgttagga ctaatttctt catgtgctta gaaaaatgcc    240
tggcagatag gaaatggtca atattattat tattgataag atgaccattt tggagtttag    300
aaaaccattt tcaatgccta tgaaataaca actccataag ccattcccctt aaatccagta   360
gactgaattc tcacaagtcc tcatcactca tcatttctac atcctgctga tttacaaata    420
cttcttcata ccatggttta tgtctttgct taatatcaag gaggatggat tccatggtag    480
agccaaactc aatgatacta cgagtctcat tttggtaagt ataagcaaag ccagcagcat    540
gcatggccac caatgaacct tttgaatcaa acacagggga gcccggaagc cccaaagaaa    600
aattcagtgt cataggtaat cacatcangg ttgtgaacta ttttctggaa acttctttga    660
gtatacatat ggacatactc tggactttct gctttttttag actgaacacg ttcctgacat   720
ttctttgctc gctgaccctg anggat                                         746
```

<210> 307
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 307
gnnnnntncn antggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtact ccagcccagg cgacagagtg 120
agactcagtc tcaaaaaaaa aaaaaatttg ggcaagttat agtccatctc atagtgttgt 180
taggactaat ttcttcatgt gcttagaaaa atgcctggca gataggaaat ggtcaatatt 240
attattattg ataagatgac cattttggag tttagaaaac cattttcaat gcctatgaaa 300
taacaactcc ataagccatt cccttaaatc cagtagactg aattctcaca agtcctcatc 360
actcatcatt tctacatcct gctgatttac aaatacttct tcataccatg gtttatgtct 420
ttgcttaata tcaaggagga tggattccat ggtagagcca aactcaatga tactacgagt 480
ctcattttgg taagtataag caaagccagc agcatgcatg gccaccaatg aacctttga 540
atcaaacaca ggggagccgg aagccccaaa gaaaaattca gtgtcatagg taatcacatc 600
anggttgtga actattttct ggaaacttct ttgagtatac atatggacat actctggact 660
ttctgctttt ttagactgac acgttcctga catttctttg ctcgctgacc ctgagggatc 720
acang 725

<210> 308
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 308
gnnnntgaaa gtaatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga 60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag 120
gtacgcgggg tgacaagtag caacatggct tgggtcccct gtgcagcatc agcttatgct 180
gccacaagtc agtttgcacc ctaggtaccc aggagctagt atccttagat ctttctatcg 240
ctaacttaat tctcttcgtt atttatctga ccctctaact ccatgtctaa cttgcattaa 300
aaaaaaaaaa attctttaca gtcaacccaa gcttaacatg gactcaggtt ccccagcagc 360
cttaatttgt tttgttaaca tctgttcctt ctttttcagc tctcctagag tatttctgag 420
tgttgtgttc atctaatctt agtattcttt taattacaaa ttgacctcac agcttgaggt 480
ttcctgtgtc ttattctgtg gactacctgt gctcctttgc ttcccctccc ctcgcataat 540
aactatatta agaaattttt tttggccttg agttggctgg aaaaaaaata taaaatttaa 600
aaaaaaaaan nnnnnnnnaa aaaaaaaaag tacctnggcc gggaccacgc taanggcgaa 660
ttccagcaca ctggcggccg ttactaagtg gatccgaact cggtaccaac ttggcgtaat 720
catggcatag ctggttcctg ngga 744

<210> 309
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 309
gnnnntncga ntgggccctc tagatgcatg ctcgagcggc cgccagtgtg atggatatct 60
gcagaattcg ccctttcgag cggccgcccg ggcaggtacg cggggtgaca agtagcaaca 120
tggcttgggt cccctgtgca gcatcagctt atgctgccac aagtcagttt gcaccctagg 180
tacccaggag ctagtatcct tagatctttc tatcgctaac ttaattctct tcgttattta 240
tctgaccctc taactccatg tctaacttgc attaaaaaaa aaaaaattct ttacagtcaa 300
cccaagctta acatggactc aggttcccca gcagccttaa tttgttttgt taacatctgt 360

```
tccttctttt tcagctctcc tagagtattt ctgagtgttg tgttcatcta atcttagtat     420
tcttttaatt acaaattgac ctcacagctt gaggtttcct gtgtcttatt ctgtggacta     480
cctgtgctcc tttgcttccc ctcccctcgc ataataacta tattaagaaa tttttttgg      540
ccttgagttg gctggaaaaa aaatataaaa tttaaaaaaa aaannnnnnn nnnnaaaaaa     600
aaaagtcctt ggccgggacc acnctaangg cgaaattcca gcacaactgg gcggnccgtt     660
actaagggga atcccnaact tnggnacccn aaacttgggc gtaaaacaat gggncaataa     720
gctggnnncc ctggnggtga aaaatt                                          746

      <210> 310
      <211> 751
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(751)
      <223> n = A,T,C or G

      <400> 310
gnnnntgana gtaatacgac tcactatagg gcgaattggg ccctctagat gcatgctcga      60
gcggccgcca gtgtgatgga tatctgcaga attcgccctt tcgagcggcc gcccgggcag     120
gtacttaatg cctttctcct cctggacatc agagagaaca cctgggtatt ctggcagaag     180
tttatatttc tccaaatcaa tttctggaaa aaacgtgtca ctttcaaagt cttgcatgat     240
ccttgtcaca aatagtttaa gatggcctgg gtgattcatg gcttccttat aaacagaact     300
gccaccaact atccagacca tgtctacttt atttgctaat tctggttgtt cagtaagttt     360
taaggcatca tctagacttc tggaaagaaa atgagctcct tgtggaggtt ccttgagttc     420
tctgctgaga actaaattaa ttctaccctt taaaggtcga ttcttctcag gaatggagaa     480
ccaggtcttc ttacccataa tcaccagatt ctgnttacct tctactgaag aagttgtggt     540
cattctctgg aaatatctga attcattcct gagcggtggc caaggcangt ncccgttctt     600
gccgatgccc atgttctggg acacagcgac gatgcagttt agcgaaccaa ccatgacagc     660
aaccgggang accttcgagc cccgttcgnt acaagccccc gcgtaccttn gggccgngaa     720
cacgcttaag ggcgaattnc aacacactgg c                                    751

      <210> 311
      <211> 724
      <212> DNA
      <213> Homo Sapien

      <220>
      <221> misc_feature
      <222> (1)...(724)
      <223> n = A,T,C or G

      <400> 311
gnnttncnan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg      60
cagaattcgc cctttcgagc ggccgcccgg gcaggtactt aatgcctttc tcctcctgga     120
catcagagag aacacctggg tattctggca gaagtttata tttctccaaa tcaatttctg     180
gaaaaaacgt gtcactttca aagtcttgca tgatccttgt cacaaatagt ttaagatggc     240
ctgggtgatt catggcttcc ttataaacag aactgccacc aactatccag accatgtcta     300
ctttatttgc taattctggt tgttcagtaa gttttaaggc atcatctaga cttctggaaa     360
gaaaatgagc tccttgtgga ggttccttga gttctctgct gagaactaaa ttaattctac     420
cctttaaagg tcgattcttc tcaggaatgg agaaccaggt cttcttaccc ataatcacca     480
gattctgttt accttctact gaagaggttg tggtcattct ctggaaatat ctgaattcat     540
tcctgagcgg tggccaaggc angtccccgt tcttgccgat gcccatgttc tgggacacag     600
cgacgatgca gtttancgaa ccacccatga cagcagcggg aggaccttcg agcccgctcg     660
ttacaagccc ccgcgtacct tnggccgcga acaccttang gcgaaattca acacactggc     720
ggcc                                                                  724

      <210> 312
      <211> 738
      <212> DNA
      <213> Homo Sapien
```

<220>
<221> misc_feature
<222> (1)...(738)
<223> n = A,T,C or G

<400> 312
nnnntttgaa gnctacnact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgcccttt gagcggccgc ccgggcaggt 120
acgcgggggg cagacatggc gacattgaca gtggtccagc cgctcacccct ggacagagat 180
gttgcaagag caattgaatt actggaaaaa ctacaggaat ctggagaagt acgttcacta 240
attatctaca aggacaaaat cagttgtatt tacaaaactc tacttcagtg tttgttttag 300
ttttttttt actgaaactt gtttttgtga atactctgtg cttagaatta aatatcactt 360
tcttatgaac aacataactt cttcagattg tgtatatgaa aacattagca agtcttgttt 420
tttctatgaa gcaaacacaa ttggtgacaa aggttgtcaa tcatttcttc aaaattataa 480
tgcagttcta atggtcagca tattttgata ttaaatttaa agatcacctc tctgcatttg 540
tttttaaatt atgctaatac accacacatt atgttggtat gttttggtct gtcctcggcc 600
gcgaccacgc ttanggcgaa ttccagcaca ctggcgggcc gttactagtg gatccgagct 660
cggtccaagc tggcgtaatc atggtcatag ctggttcctg tgtgaaatgg tatccgttac 720
aattcccaca catacgan 738

<210> 313
<211> 720
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(720)
<223> n = A,T,C or G

<400> 313
gnnttncaan tgggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc cctttgagcg gccgcccggg caggtacgcg gggggcagac atggcgacat 120
tgacagtggt ccagccgctc accctggaca gagatgttgc aagagcaatt gaattactgg 180
aaaaactaca ggaatctgga gaagtacgtt cactaattat ctacaaggac aaaatcagtt 240
gtatttacaa aactctactt cagtgtttgt tttagttttt tttttactga aacttgtttt 300
tgtgaatact ctgtgcttag aattaaatat cactttctta tgaacaacat aacttcttca 360
gattgtgtat atgaaaacat tagcaagtct tgttttttct atgaagcaaa cacaattggt 420
gacaaaggtt gtcaatcatt tcttcaaaat tataatgcag ttctaatggt cagcatattt 480
tgatattaaa tttaaagatc acctctctgc atttgttttt aaattatgct aatacaccac 540
acattatgtt ggtatgtttt gntctgtacc tcggccgcga ccacgctaan ggcgaattca 600
ncacactggc ngncgttact agtggatccg agctcggacc aaacttggcg taatcatngn 660
catagctggt tcctgtgtga aaatggtatc cgttacaatt tcacacacat acgagccgga 720

<210> 314
<211> 740
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(740)
<223> n = A,T,C or G

<400> 314
gnnnnttnaa gnctacgact cactataggg cgaattgggc cctctagatg catgctcgag 60
cggccgccag tgtgatggat atctgcagaa ttcgccctta gcgtggtcgc ggccgaggta 120
cttttttttt tttttttttt ttagtgcttt ctactttatt aaacatcaaa gcccaaatag 180
atgttccctg tggaggagga cttaaggaca ctaggggagg agaaagggac acctgggaag 240
agaatcacac cacagagacc aatcttcaca aaaagggtcc aatattgatt tctagggagg 300
agcagggcat ggtcagctca aatttggtga taacgtcagg atgaaggacc ccaagcttcc 360

```
cgacgctttg acccctggca aagatctctg cacatcgccc ggggaagaaa gcaggccctt     420
ctgatgcttt gatcacatat ccccccttgt cttcaccagg aggcacatcg agcaactgca     480
taattctgtc cagcagccca tgaatgatct caaacccagg attcttgntg taataaacag     540
cactgagatg tctgtagttt tttgcaccta catctgnatt agaatctttt attacaatgt     600
cagagatttc aaacagtttc agtggaaggg gcatcttacg attgctgcta tggcttcagg     660
angccaggaa gaagggtagt gcgtgccacc tgaaattcac tggtttagga tacttatgtg     720
gactggcttt gttgcaaaan                                                 740
```

<210> 315
<211> 722
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(722)
<223> n = A,T,C or G

<400> 315

```
gnnnnnnnnn nnnnnnntnn atgctgctcg agcggccgcc agtgtgatgg atatctgcag      60
aattcgccct tagcgtggtc gcggccgagg tacttttttt ttttttttt ttttagtgct      120
ttctacttta ttaaacatca aagcccaaat agatgttccc tgtggaggag gacttaagga     180
cactagggga ggagaaaggg acacctggga agagaatcac accacagaga ccaatcttca     240
caaaaagggt ccaatattga tttctaggga ggagcagggc atggtcagct caaatttggt     300
gataacgtca ggatgaagga ccccaagctt cccgacgctt tgacccctgg caaagatctc     360
tgcacatcgc ccggggaaga aagcaggccc ttctgatgct ttgatcacat atcccccctt     420
gtcttcacca ggaggcacat cgagcaactg cataattctg tccagcagcc catgaatgat     480
ctcaaaccca ggattcttgt tgtaataaac agcactgaga tgtctgtagt tttttgcacc     540
tacatctgna ttagaatctt ttattacaat gtcagagatt tcaaacagtt tcagtggaaa     600
ggggcatctt acgatttgct gctatggnct tcangaggnc angaaaaagg gtantgcntg     660
cccctgaaat tcanctggtt taggattacc tatgtggact ggctttgntg caaaaaaatn     720
cn                                                                    722
```

<210> 316
<211> 753
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(753)
<223> n = A,T,C or G

<400> 316

```
gnnnnnttna nagtnnnnac gactcactat aggggcgaac nctctncatg catgctcnan      60
cggncnncan ngtgatggat atntgctgan ttcgccctta ccntngcntn ggccgaggcg     120
cagntcccac gtntngctcc ncactncnnn accgcagggg cncngacncn gaccngngnn     180
ncnnngngag tnccncagca ctacttggga nggctanagg gaagnttgga aataaaattc     240
caaannttgg agtaaaagca atncangcgn ngattatata tgntnncccct ttctgacacn    300
ncctagagcg taggggggaac atgngtntat ctgtgggana tnaacaagat ggagtcccaa    360
agactttaac aaagntattt cttaannatc cnctacaatn nanaatncat tattcatatn     420
tactntatgc tgnnagtgag tatntatgct ngtcctattt aaacttgnga gaanaagtgg     480
tntcccttga tacattnaga aatatggggg ctatcttgnt ncattgtggg ggtggggcan     540
aagganaatn aatgcangat gaccctgttg aangaatctt aacatggcca acanggggac     600
ngtttacagt cgattaccag gaaangcaag ccttggggtt tctactgcng gtgggggctg     660
tcatgaactt naaaatccan agnctatacc aggaaaaagt gttangaccc aattgaaang     720
ctntccaccc tttcttttnn tttgttccng cnc                                  753
```

<210> 317
<211> 893
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(893)
<223> n = A,T,C or G

<400> 317
```
gtgnnntntn cnaaatggnc cntttnaatg cctncctcga gcgggccgcc agtgtgatgg      60
atntntaatt cgnccttagc gtggtcgcgg ccgnngtacn aangaaataa aantnacagt     120
ntcaaagaac caaantaagt cggacacaaa cccctgtcac cannagagtc ccatanacat     180
aannnggntg ntgtcaagna ggattnaaat taactttaac aacnttntat ataatgctac     240
attccccaat taataaagga nagttcacat atacanctaa ntgntaattg tggaaanaag     300
ggtgaaantn tgcatantta atannaaana atgctgaang cttttncata nnattnnctt     360
aaaaatncac ttncnatgca gcantangtn tacatgctta atntatcntg cnagtgattn     420
ntatgcttgt cctacatgac ntaccttgaa caactggnac tncccagatt catactgaaa     480
tatggggncg ntaantatnt tgggancggn annacntgaa tcctcaaagg atannnnntn     540
tccagntgga tgaaaccnat nattnaaang gatatnntna accatnggan cgaatgnncg     600
nngntctttt tcaatnntnc gngaagntnc cnnttnnata ncccgngggc cncattgngg     660
ggnntatntn ncaatcaann ccnngagntg tntnntcntt cntcnaccgc ataacctttt     720
gccataggga accttntttn aaccccttttg gnttatnggg aaanaannnn nnttttaaat     780
tcnccaaaat ngggaaaaan aacccttntc actctaaaaa nttanccnta gacctanttn     840
tngngncata tttgntaaac nctatggncc ctcnagnggg gnnctgggnc nnc            893
```

<210> 318
<211> 744
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 318
```
gnnnngattg tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc      60
ggccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt     120
acctcattag taattgtttt gttgtttcat ttttttctaa tgtctcccct ctaccagctc     180
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgctca     240
ttctctctga agtctaggtt acccattttg gggacccatt ataggcaata aacacagttc     300
ccaaagcatt tggacagttt cttgttgtgt tttagaatgg ttttcctttt tcttagcctt     360
ttcctgcaaa aggctcactc agtcccttgc ttgctcagtg gactgggctc cccagggcct     420
aggctgcctt cttttccatg tcccacccat gagccctcca ctggacagct cagtaagcct     480
ggcccttcat tctgcgctgt gttcttcctc tgtgaaaatc caatacctct tacctcctct     540
gcatgcaaag attctcaagg attgtcagac ttcaaacgta acagcagaac caccagaagg     600
tcctataaat gcagtagtga ccttctcaag ctgtcanggc tttaaatagg atttgggatt     660
taatgctatg tatttttaaa ggaaagaaat aagagttgct agttttaaaa atgcatgtct     720
tttaccaatt canaatctgg cccc                                            744
```

<210> 319
<211> 720
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(720)
<223> n = A,T,C or G

<400> 319
```
gngtttaaac cttcttanng ctgctcgagc ggccgccagt gtgatggata tctgcagaat      60
tcgccctttc gagcggccgc ccgggcaggt acctcattag taattgtttt gttgtttcat     120
tttttctaa tgtctcccct ctaccagctc acctgagata acagaatgaa aatggaagga      180
```

```
cagccagatt tctcctttgc tctctgctca ttctctctga agtctaggtt acccattttg      240
gggacccatt ataggcaata aacacagttc ccaaagcatt tggacagttt cttgttgtgt      300
tttagaatgg ttttcctttt tcttagcctt ttcctgcaaa aggctcactc agtcccttgc      360
ttgctcagtg gactgggctc cccagggcct aggctgcctt cttttccatg tcccacccat      420
gagccctcca ctggacagct cagtaagcct ggcccttcat tctgcgctgt gttcttcctc      480
tgtgaaaatc caatacctct tacctcctct gcatgcaaag attctcaagg attgtcagac      540
ttcaaacgta acagcagaac caccagaagg tcctataaat gcagtagtga ccttctcaag      600
ctgtcanggc tttaaatagg atttgggatt taatgctatg tatttttaaa ggaaagaaat      660
agagttgcta gttttaaaaa tgcatgtctt ttaaccaatt cagaatctgg ccccnaactt      720
```

<210> 320
<211> 694
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(694)
<223> n = A,T,C or G

<400> 320

```
atgctcgagc ggncggcant gtgatggatn tctgcagaat tcgccctttc gagcggccgc       60
ccgggcaggt actattccgg atatacaaga tcactgggag atgttgatga tggagacaca      120
gtgacagatt tcatggccca agagcgagaa agaggcntta ctattcaatc agctgctgtt      180
acatttgatt ggaaaggtta tagagtcaat ctaattgata caccaggtca tgtggacttt      240
accttggagg ttgagcggtg cctaagagtg ttggatggtg cantggctgt atttgatgcc      300
tctgctggtg tagaggccca gactntcaca gtatggaggc aagctgataa acacaatata      360
cctcgaatct gtttttttaaa caagatggac aaaactggag caagctttaa gtatgcagtt      420
gaaagcatca gagagaagtt aaaggcaaag cctttgcttt tacagttacc aattggtgaa      480
gccaaaactt tcaaaggagt ggtggatgta gtaatgaang aaaaacttct ttgggaattg      540
caattcaana tgatggaaaa gactttgaga gaaagcccct cttggaaatg aatgatcctg      600
aattgctgaa ggaaacaact gaacaaggaa tgccttaatt gaacaaagtt gcagatttgg      660
atgatgaatt tgctgacttg gttttaagaa gaat                                  694
```

<210> 321
<211> 781
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(781)
<223> n = A,T,C or G

<400> 321

```
gngttnacna ntgggccctc tngatgctgc tcgagcggcc gncagtgtga tggatntctg       60
cagaatncgc cctncgggcg gccgnccggg caggtactat nccggatata caagatcact      120
gggagatgtt gatgatggag acncagngac agatttcatg gcccaagagc gagaaagagg      180
cnttactatn caatcagctg ctgttacatt cgattggaaa ggttatngag tcaatctaat      240
tgatncacca ngtnatgtgg actttacctt ggaggttgag cggtgcctaa nagtgttgga      300
tggtgcanng gctgtatttg atgcctctgc tggtgtagag gcccagactc tcacagtatg      360
gatgcaagct gataaacaca atatacctng aatctgtgtt ttaaacaaga tggacaaaac      420
tggagcaagc tttaaagtnt gcagttgaaa gcatcagaga gangttnaag gcanagcctt      480
tgcttttaca gtttcccaat tgggtgaaac ccaaaacttt tcaaagggag ttggttggat      540
tgtaagtaat gaaaggaaaa acttctttgg gaaantggca atttcaanat gattggaaaa      600
ngacttttgg gagaaaagcc ccttcttggg aaaatngaaa tgatncctga aatttgcngt      660
aaanngaaaa cnaacntgna atccaangga attncccttt aanttggaac aaaggnttgc      720
naanttttng attgaatnga atttgncnga cntttnggtt ttangaaaga aattaaagng      780
g                                                                      781
```

<210> 322
<211> 744

<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(744)
<223> n = A,T,C or G

<400> 322
```
gnnntganag tatcgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg      60
gcccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt     120
acgcggggac tgggtttttc tccttttgta gccttttcct ttagtctcct cttcccggtg     180
gttggtaaaa agaggtgaat tgacagccta tgttgaagac actgtgcttt tctcaagaag     240
gacatccaaa cagcaagtct acttctttct ctttaacgat gtgctcatta tcaccaagaa     300
gaagagtgaa gaaagttaca acgtcaatga ttattcctta agagatcagc tattggtgga     360
atcttgtgac aatgaagagc ttaattcttc tccagggaag aacagctcca caatgctcta     420
ttcaagacag agctctgcca gtcacctctt tactctgaca gtccttagta accacgcgaa     480
tgagaaagtg gagatgctac taggagctga gacgcagagc gagcgagccc gctggataac     540
tgccctggga cacagcagcg ggaagccgcc tgcagaccga acctnactga cccaggtgga     600
aatcgttagg tcatttactg ctaagcagcc agatgaactc ttcctgcagt ggctgacgtc     660
gtcctcatct atcaacgtgt cagcgatggc tggtatgaag gggaacgact tcgagatgga     720
gaaagaagnt gggttcctat ggaa                                            744
```

<210> 323
<211> 723
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(723)
<223> n = A,T,C or G

<400> 323
```
gtgtttcaan cggtcctcta gatgctgctc gagcggccgc cagtgtgatg gatatctgca      60
gaattcgccc tttcgagcgg ccgcccgggc aggtacgcgg ggactgggtt tttctccttt     120
tgtagccttt tcctttagtc tcctcttccc ggtggttggt aaaaagaggt gaattgacag     180
cctatgttga agacactgtg cttttctcaa gaaggacatc caaacagcaa gtctacttct     240
ttctctttaa cgatgtgctc attatcacca agaagaagag tgaagaaagt tacaacgtca     300
atgattattc cttaagagat cagctattgg tggaatcttg tgacaatgaa gagcttaatt     360
cttctccagg gaagaacagc tccacaatgc tctattcaag acagagctct gccagtcacc     420
tctttactct gacagtcctt agtaaccacg cgaatgagaa agtggagatg ctactaggag     480
ctgagacgca gagcgagcga gcccgctgga taactgccct gggacacagc agcgggaagc     540
cgctgcagac cgaacctcac tgacccaggt ggaaatcgtt aggtcattta ctgctaagca     600
gccagatgaa ctcttcctgc angtggctga cgtcgtcctc atctatcaac gtgtcancga     660
tggtggtatg aaggggaacg actacnagat ggagaaagaa gctggtttcc tatggaatgt     720
gcc                                                                   723
```

<210> 324
<211> 746
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 324
```
gggnttgaag ncncgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg      60
gcccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac     120
cttgagatct gagcaactgt gttaatgaag taatagcaat ggtccacagt gaaagatgtg     180
```

```
ttggggtttg caaaacaagc attccgtcac ctctttaata atgtcacaga ctttttttaaa     240
agagaggcta tcaagttgta atataatctg tcatgtttta tttaggaagg aaggtaaatt     300
tgtgcttgca cggggatcat tttgtattat ttntgctaat acccagttga agctaaaaag     360
caactatttg aatcctgtga attaatttat aagaatgtta aacagctntg gaaatacatg     420
catcttatga atcatagcct tatttagcaa gatcaatgtt aaagtgttga tatatggcaa     480
gtatttaaca cattcacagt gntagtttga tttcaactgt gaattgtctt acagtttttt     540
caaacctagt gtntctatgg acacctgctc tgaattgtac ccctcagtca ccaccaaagc     600
atttncaccc ctttcaaccc ccaatcagac cantgctttc agtggtattg gaggacttnt     660
atcacagctt catnangtgg tcttggcaca ggcagnctga ctngcttngg aactggtgct     720
tttggactcc cttcaanngn aatant                                          746
```

<210> 325
<211> 742
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(742)
<223> n = A,T,C or G

<400> 325

```
gtgtttcann cggccctcta gatgcatgct cgagcggccc gccagtgtga tggatatctg      60
cagaattcgc ccttagcgtg gtcgcggccg aggtaccttg agatctgagc aactgtgtta     120
atgaagtaat agcaatggtc cacagtgaaa gatgtgttgg ggtttgcaaa acatgcattc     180
cgtcacctct ttaataatgt cacagacttt tttaanagag aggctatcaa gttgtnatat     240
aatctgtcat gtattattta agaaggaagg taaatntgtg cttgcacggg gatcattttg     300
nattattnct gctnataccc agctgaagct nanaancnac tntttgnatc ctgtgantta     360
atncatanna atgttanaca gctntggaaa tccatgcctc ttatgaatca tngccttatt     420
tancangatc aatgttaaag ntgttgatat nnggcaagtn tntaacacat tnacantgct     480
agtntgattt caactgngaa ttgncttacc gtntttnnaa acctanangа atntatngac     540
acctnctctn aatngnnncc ctcaancacc acnaaanctt ttncnnccct tncaaccccc     600
natcngaccn cngcattcag tngnaancng aangactttc atcacaactg gncaanatnt     660
nggactttgg cgccatgcnn accctcttgg nctttngaac nnggttgcct tttnggactt     720
tncncctgng ngataaccac cn                                              742
```

<210> 326
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

<400> 326

```
atgntttaag tatacgactc actatagggc gaattgggcc ctctagatgc atgctcgagc      60
ggccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt     120
actgtatcat tggcagatgt gacgtcaccg acaaccagag tgaagtggcg gacaaaactg     180
aggattacct gtggctgaag ttgaaccaag tgtgttttga cgacgatggc accagctccc     240
cacaagacag gctcactctc tcacagttcc agaagcagtt gttggaagac tatggcgagt     300
cccactttac ggtgaaccag caacccttcc tctacttcca agtcctgttc ctgacagcgc     360
agtttgaagc agcagttgcc tttcttttcc gcatggagcg gctgcgctgc catgctgtcc     420
atgtagcact ggtgctgttt gagctgaagc tgcttttaaa gtcctctgga cagagtgctc     480
aactcctcag ccacgaacct ggtgaccctt cttgcttgcg gcggctgaac ttcgtgcggc     540
tcctcatgct gtacctcggc cgngaccacg ctaagggcga attccagcac actggcggnc     600
gttactagtg gatccgagct cggtaccaaa cttggcgtaa tcatggncat agctggttcc     660
tgtgtgaaat ggtatccgtt acaatttcac acaacatacg agccgggaag catnaagtgt     720
naaacctggg gtgcctnatg agtgacn                                         747
```

<210> 327

<211> 724
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(724)
<223> n = A,T,C or G

<400> 327
gtnatgaaac cnttctntng ngcatgctcg agcggccgcc agtgtgatgg atatctgcag 60
aattcgccct ttcgagcggc cgcccgggca ggtactgtat cattggcaga tgtgacgtca 120
ccgacaacca gagtgaagtg gcggacaaaa ctgaggatta cctgtggctg aagttgaacc 180
aagtgtgttt tgacgacgat ggcaccagct ccccacaaga caggctcact ctctcacagt 240
tccagaagca gttgttggaa gactatggcg agtcccactt tacggtgaac cagcaaccct 300
tcctctactt ccaagtcctg ttcctgacag cgcagtttga agcagcagtt gcctttcttt 360
tccgcatgga gcggctgcgc tgccatgctg tccatgtagc actggtgctg tttgagctga 420
agctgctttt aaagtcctct ggacagagtg ctcagctcct cagccacgag cctggtgacc 480
ctccttgctt gcggcggctg aacttcgtgc ggctcctcat gctgtacctc ggccgcgacc 540
acgctaaggg cgaattccag cacactggcg gccgttacta gtggatccga gctcggtacc 600
aagcttggcg taatcatggt catagctgtt tcctgtgtga aattgtatcc gctcacaatt 660
ncacacaaca tacgagccgg aagcataaag tgtaaacct ggggtgccta atgagtgaac 720
taan 724

<210> 328
<211> 747
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(747)
<223> n = A,T,C or G

<400> 328
tgnntgttag atacgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gcccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
tttttttttt tttttaaag acagagtctt gctctgtcac ccaggctgga gtgcagtggc 180
acgatctcgg ctcactgcaa gctctgcctc ccgggttcac gccattctcc tgcctcagcc 240
tcccgagtag ctgggactac aggtgcccgc caccatgccc ggctgatttc tttttgtatt 300
tttagtagag acggagtttc accgtgttag ccaggatggt ctcgatctcc tgacctcgtg 360
atccgcccgc cttggcctcc aaagtgctgg gattacaggt gtgagctacc gcgcccggcc 420
tattatcttg tactttctaa ctgagccctc tattttcttt attttaataa tatttctccc 480
cacttgagaa tcacttgtta gttcttggta ggaattcagt tgggcaatga taactttat 540
gggcaaaaac attctattat agtgaacaaa tgaaaataac agcgtatttt caatattttc 600
ttattcctta aattccactc ttttaacact atgcttaacc acttaatgtg atgaaatatt 660
cctaaaagtt aaatgactat taaagcatat attggtgcat gnatatatta aagtacccga 720
tactctaaat aaaaatccac tggtccn 747

<210> 329
<211> 725
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(725)
<223> n = A,T,C or G

<400> 329
gcgtttcaan tgggccctct ngngcatgct cgagcggccg ccagtgtgat ggatatctgc 60
agaattcgcc cttagcgtgg tcgcggccga ggtacttttt tttttttttt taaagacaga 120

gtcttgctct gtcacccagg ctggagtgca gtggcacgat ctcggctcac tgcaagctct 180
gcctcccggg ttcacgccat tctcctgcct cagcctcccg agtagctggg actacaggtg 240
cccgccacca tgcccggctg atttcttttt gtatttttag tagagacgga gtttcaccgt 300
gttagccagg atggtctcga tctcctgacc tcgtgatccg cccgccttgg cctccaaagt 360
gctgggatta caggtgtgag ctaccgcgcc cggcctatta tcttgtactt tctaactgag 420
ccctctattt tctttatttt aataatattt ctccccactt gagaatcact tgttagttct 480
tggtaggaat tcagttgggc aatgataact tttatgggca aaaacattct attatagtga 540
acaaatgaaa ataacagcgt attttcaata ttttcttatt ccttaaattc cactctttta 600
acactatgct taaccactta atgtgatgaa atattcctaa aagttaaatg actattaaag 660
catatattgg tgcatgtata tattaagtag cccgatctct naataaaaat ccactggtac 720
agata 725

<210> 330
<211> 741
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(741)
<223> n = A,T,C or G

<400> 330
gnnntganag atacgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gcccgccagt gtgatggata tctgcagaat tcgcccttag cgtggtcgcg gccgaggtac 120
tttttttttt tttttttttt tttttttttt ggaagtttaa tttactcaca gttcaacatg 180
gctggggagg cctcaggaaa tttacaatta taacagaagg caaaggggaa gccagatacc 240
ttcttcacaa ggtggcagga aggagaagag ccgagagaag gcggaagaat cccttataaa 300
accatcagat ctcgtgagaa ctcacttgct atcaggagaa cagcatgggg gaaccgcccc 360
caggattcaa tgacctncac ctggtctctc ccttgacacg tgaggattat ggggattaca 420
attccagatg agatttgggt ggggacacaa agccaaacca tatcaactgt gactaccttg 480
ggtaagggcc atccaggcag aggcaggggg aacattctgg gcaaaggcct tggggcaggg 540
gcctggtatg ttcagatagc ancaagtagg ccagantggc cggaggggag taagtgtggg 600
gaggccagtg ganagatgag ggtagggaag ggatggatca gatcatgcag ggccccgggg 660
gccacaggaa ngacctnagc atttactgca agtaangtgg gaaccatcga atgtctaagc 720
naggaggaat ccctgtgact c 741

<210> 331
<211> 727
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(727)
<223> n = A,T,C or G

<400> 331
gtnnnncgan ngggccctct agatgcatgc tcgagcggcc gccagtgtga tggatatctg 60
cagaattcgc ccttagcgtg gtcgcggccg aggtactttt tttttttttt tttttttttt 120
ttttttggaa gtttaattta ctcacagttc aacatggctg gggaggcctc aggaaattta 180
caattataac agaaggcaaa ggggaagcca gataccttct tcacaaggtg gcaggaagga 240
gaagagccga gagaaggcgg aagaatccct tataaaacca tcagatctcg tgagaactca 300
cttgctatca ggagaacagc atgggggaac cgcccccagg attcaatgac ctccacctgg 360
tctctccctt gacacgtgag gattatgggg attacaattc cagatgagat ttgggtgggg 420
acacaaagcc aaaccatatc aactgtgact accttgggta agggccatcc aggcagaggc 480
agggggaaca ttctgggcaa aggccttggg gcaggggcct ggtatgttca gatagcagca 540
agtaggccag antggccgga ggggagtaag tgtggggagg ccagtggaaa aatganggta 600
gggaaaggga tggatcagat catgcagggc cccgggggcc acangaagga cctnacattt 660
actgcaagta angtgggagc catcgaatgt tctaagcana ngangaatcc ctgngactca 720
ngtgttn 727

<210> 332
<211> 734
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(734)
<223> n = A,T,C or G

<400> 332
gnntganagt atacgactca ctatagggcg aattgggccc tctagatgca tgctcgagcg 60
gcccgccagt gtgatggata tctgcagaat tcgccctttc gagcggccgc ccgggcaggt 120
acccttctcg cttttgccat tagccaagga tagaagctgc agtggtatta attttgatat 180
aatctttcaa accagcttca tgtggcttcc cttttctttg ttcaagatga gggccaggag 240
gggaaacatc acacctgccc taaaccctgt tcctggaggt cagcatttga tctgttgcaa 300
gcccctcttt ctgtcccctc ttcctaccct gcctcccatg actttgctcc tcacactttt 360
ggaaccatgc cttccggggg ggcccatctc ttctggccgt ccttgtctct gggccacttg 420
gagtgtgtga taaatcagtc aagctgttga agtctcagga gtctctggta gcctgcagaa 480
gtaagcctca tcatcagagc ctttcctcaa aactggagtc ccaaatgtca tcaggttttg 540
nttttttttc aaccactaag aacccctctg cttttaactc tagaatttgg gcttggacca 600
gatctaacat cttgaatact ctgccctcta gaccttcacc ttaatggaan gtggatccca 660
nganggtgta atggacatca agccactcgc ggcagcatgg agctatacta agcatcctta 720
nggtctgcct ctcn 734

<210> 333
<211> 710
<212> DNA
<213> Homo Sapien

<220>
<221> misc_feature
<222> (1)...(710)
<223> n = A,T,C or G

<400> 333
ntgggccctc tngngctgct cgagcggccg ccagtgtgat ggatatctgc agaattcgcc 60
ctttcgagcg gccgcccggg caggtaccct tctcgctttt gccattagcc aaggatagaa 120
gctgcagtgg tattaatttt gatataatct ttcaaaccag cttcatgtgg cttccctttt 180
ctttgttcaa gatgagggcc aggaggggaa acatcacacc tgccctaaac cctgttcctg 240
gaggtcagca tttgatctgt tgcaagcccc tctttctgtc ccctcttcct accctgcctc 300
ccatgacttt gctcctcaca cttttggaac catgccttcc gggggggccc atctcttctg 360
gccgtccttg tctctgggcc acttggagtg tgtgataaat cagtcaagct gttgaagtct 420
caggagtctc tggtagcctg cagaagtaag cctcatcatc agagcctttc ctcaaaactg 480
gagtcccaaa tgtcatcagg ttttgttttt ttttcagcca ctaagaaccc ctctgctttt 540
aactctagaa tttgggcttg gaccagatct aacatcttga atactctgcc ctctagagcc 600
ttcagcctta atggaagggt ggatccaang anggtgtaat ggaacatcaa gccactcgcg 660
gcagcatgga gctatactaa gcatcettta nggtctgcct cttcagcatt 710

<210> 334
<211> 2051
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(2051)
<223> n = A,T,C or G

<400> 334
gcccttgcct cagcctaccc agtagctggt gatggccatc cttttataaa tgcaacgtcc 60
ttcgttcctg ttaagtcatg gggaggaag gccttttctc tcttcagtct aataatcaac 120

```
tgttcactat tcacaatagc aacatcatgg gctgaaccta tgtgtccatc aacagatgat    180
tagattttaa aatgtgcata tataccatgg aatacatacg caaccatcaa aaataatgaa    240
atcacatctt ttgcagcaat atggatggaa ctggaagccc ttatcgtaag tgaaatgact    300
cagagacaga aagtcagaaa ctgcatgttc tcatttggaa actgaaaatc acacacacat    360
aaatctaata aagacatggg tactttattt tcaaaacact catatgttgc aaaaaacaca    420
tagaaaaata aagtttggtg ggggtgctga ctaaacttca agtcacagac ttttatgtga    480
cagattggag cagggtttgt tatgcatgta gagaacccaa actaatttat taaacaggat    540
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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/13181

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12N15/12 C07K14/47 C12Q1/68 G01N33/68 C07K16/18
A61K31/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HILLIER, L. ET AL.: "WashU-NCI human EST project: zu71f08.s1 Soares testis NHT Homo sapiens cDNA clone 743463" EMBL DATABASE ENTRY AA609384, 1 October 1997 (1997-10-01), XP002128750 the whole document ---	1,2,7-9
A	HILLIER, L. ET AL.: "WashU-NCI human EST project 1997: zv83c03.s1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone 760228" EMBL DATABASE ENTRY HS1226101; ACCESSION NUMBER AA425141 (VERSION 2), 28 October 1997 (1997-10-28), XP002128751 the whole document ---	1,2,7-9

-/--

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
26 January 2000	02. 05. 2000

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	ANDRES S.M.

1

INTERNATIONAL SEARCH REPORT

Internat J Application No
PCT/US 99/13181

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HILLIER, L. ET AL.: "WashU-NCI human EST project: za83e08.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone 299174" EMBL DATABASE ENTRY HS287326; ACCESSION NUMBER W05287,8 May 1996 (1996-05-08), XP002128752 the whole document ---	1,2,7-9
A	WO 98 04689 A (UROCOR INC) 5 February 1998 (1998-02-05) page 4, line 8 -page 5 page 13 -page 52 page 66 -page 85 page 112 -page 122 ---	1-11
A	HELLER ET AL: "DISCOVERY AND ANALYSIS OF INFLAMMATORY DISEASE-RELATED GENES USING cDNA MICROARRAYS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 94, March 1997 (1997-03), pages 2150-2155, XP002100125 ISSN: 0027-8424 -----	

1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 99/ 13181

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [X] Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210

2. [ ] Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. [ ] Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. [ ] As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. [X] No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11 (all partially)

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest.

[ ] No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 3.

Although claims 8 to 11 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Further defect(s) under Article 17(2)(a):

Continuation of Box 3.

Claims Nos.: 3 and 6

Present claims 3 and 6 relate to a nucleic acid sequences defined only by the (arbitrary) name of the clone they originate from. The use of these names in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is impossible to relate the clone names as given in claims 3 and 6 with the to be searched polynucleotide defined by SEQ ID 1. Consequently, no search has been carried out for claims 3 and 6 in the context of the first subject as mentionned on the communication pursuant to Art. 17(3)(a) PCT.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: Claims 1-11 (all partially)

A method for diagnosing or treating a prostate disorder by providing a probe, antisense, ribozyme capable of hybridizing to SEQ ID 1 or its complement, or an antibody capable of binding to a polypeptide encoded by SEQ ID 1.

Inventions 2 to 339: Claims 1,2,4,5,7-11 (all partially) and 3,6, 12-15 (all partially and as far as applicable)

As for subject 1. but respectively relating to SEQ IDs 2 to 339 (i.e. subject 2. corresponding to SEQ ID 2, subject 3. corresponding to SEQ ID 3,..., subject 339. corresponding to SEQ ID 339) and when applicable including the polynucleotide, vectors, cells and a composition containing the corresponding polypeptide.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Internal Application No
PCT/US 99/13181

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9804689 A	05-02-1998	AU 6642996 A	20-02-1998
		EP 0951541 A	27-10-1999
		US 5882864 A	16-03-1999